CDX-R3300/R3300S

SERVICE MANUAL

Ver. 1.2 2005.07

US Model
Canadian Model
CDX-R3300
E Model
CDX-R3300/R3300S

Photo: CDX-R3300

• The tuner and CD sections have no adjustments.

Model Name Using Similar Mechanism	NEW
CD Drive Mechanism Type	MG-611MA-186//K
Optical Pick-up Name	KSS1000E

AUDIO POWER SPECIFICATIONS
POWER OUTPUT AND TOTAL HARMONIC DISTORTION
23.2 watts per channel minimum continuous average power into 4 ohms, 4 channels driven from 20 Hz to 20 kHz with no more than 5% total harmonic distortion.

SPECIFICATIONS

CD player section

Signal-to-noise ratio	120 dB
Frequency response	10 – 20,000 Hz
Wow and flutter	Below measurable limit

Tuner section

FM

Tuning range	US, Canadian Model: 87.5 – 107.9 MHz E model: FM tuning interval: 50 kHz/200 kHz switchable 87.5 – 108 MHz (at 50 kHz step) 87.5 – 107.9 MHz (at 200 kHz step)
Antenna terminal	External antenna connector
Intermediate frequency	10.7 MHz/450 kHz
Usable sensitivity	9 dBf
Selectivity	75 dB at 400 kHz
Signal-to-noise ratio	67 dB (stereo), 69 dB (mono)
Harmonic distortion at 1 kHz	0.5% (stereo), 0.3% (mono)
Separation	35 dB at 1 kHz
Frequency response	30 – 15,000 Hz

AM

Tuning range	US, Canadian Model: 530 – 1,710 kHz E Model: AM tuning interval: 9 kHz/10 kHz switchable 531 – 1,602 kHz (at 9 kHz step) 530 – 1,710 kHz (at 10 kHz step)
Antenna terminal	External antenna connector
Intermediate frequency	10.7 MHz/450 kHz
Sensitivity	30 µV

Power amplifier section

Outputs	Speaker outputs (sure seal connectors)
Speaker impedance	4 – 8 ohms
Maximum power output	52 W × 4 (at 4 ohms)

General

Outputs	Audio outputs terminal (rear/sub switchable) Power antenna relay control terminal Power amplifier control terminal
Inputs	Antenna input terminal Remote controller input terminal (E Model)
Tone controls	Low: ±10 dB at 60 Hz (XPLOD) Mid: ±10 dB at 1 kHz (XPLOD) High: ±10 dB at 10 kHz (XPLOD)

– Continued on next page –

FM/AM COMPACT DISC PLAYER

9-961-431-03
2005G04-1
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Sony Corporation
e Vehicle Group
Published by Sony Engineering Corporation

SONY®

Power requirements	12 V DC car battery (negative ground)
Dimensions	Approx. 178 × 50 × 179 mm (7 1/8 × 2 × 7 1/8 in.) (w/h/d)
Mounting dimensions	Approx. 182 × 53 × 161 mm (7 1/4 × 2 1/8 × 6 3/8 in.) (w/h/d)
Mass	Approx. 1.2 kg (2 lb. 10 oz.)
Supplied accessories	Parts for installation and connections (1 set) Front panel case (1)

Design and specifications are subject to change without notice.

SERVICE NOTES

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

Notes on Chip Component Replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

TEST DISCS

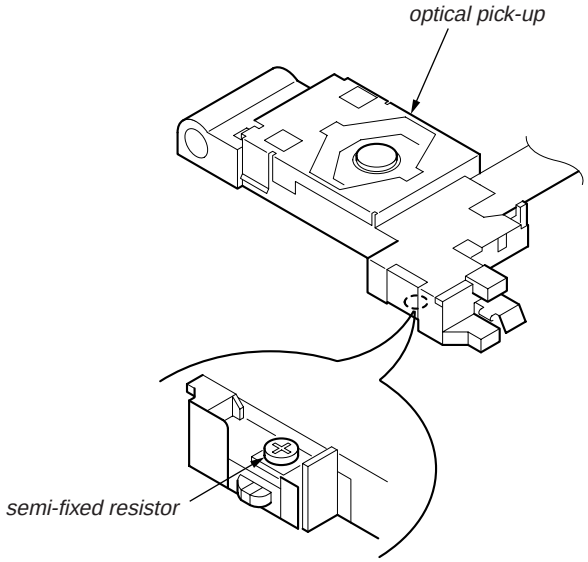
This set can playback CD-R and CD-ROM discs. The following test discs should be used to check the capability:

CD-R test disc TCD-R082LMT (Part No. J-2502-063-1)
CD-RW test disc TCD-W082L (Part No. J-2502-063-2)

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

If the optical pick-up block is defective, please replace the whole optical pick-up block.
Never turn the semi-fixed resistor located at the side of optical pick-up block.



- E model

This label is located on the bottom of the chassis.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

Notes on CD-Rs (recordable CDs)/CD-RWs (rewritable CDs)

This unit can play the following discs:

Type of discs	Label on the disc
Audio CD	COMPACT disc DIGITAL AUDIO Recordable COMPACT disc DIGITAL AUDIO ReWritable
MP3 files	COMPACT disc DIGITAL AUDIO Recordable COMPACT disc DIGITAL AUDIO ReWritable COMPACT disc Recordable COMPACT disc ReWritable

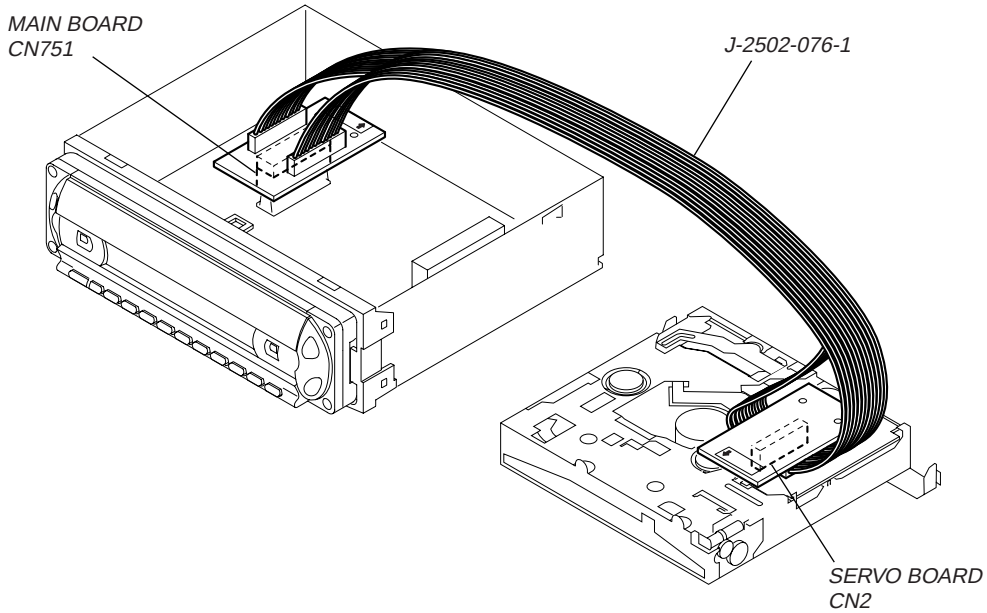
- Some CD-Rs/CD-RWs (depending on the equipment used for its recording or the condition of the disc) may not play on this unit.
- You cannot play a CD-R/CD-RW that is not finalized*.
- You can play MP3 files recorded on CD-ROMs, CD-Rs, and CD-RWs.
- A CD-R/CD-RW to which a session can be added can be played.

* A process necessary for a recorded CD-R/CD-RW disc to be played on the audio CD player.

EXTENSION CABLE AND SERVICE POSITION

When repairing or servicing this set, connect the jig (extension cable) as shown below.

- Connect the MAIN board (CN751) and the SERVO board (CN2) with the extension cable (Part No. J-2502-076-1).



● UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead free mark (LF) indicating the solder contains no lead.
(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size.)

: LEAD FREE MARK

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40°C higher than ordinary solder.
  Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
  Soldering irons using a temperature regulator should be set to about 350°C.
  Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity
  Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
  It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

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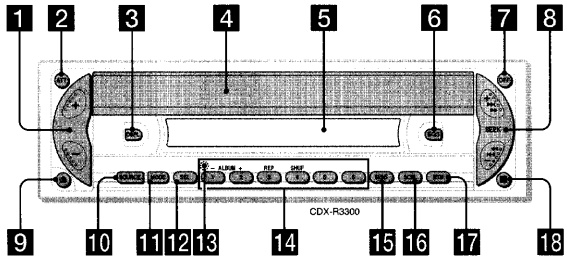
SECTION 1
GENERAL

This section is extracted from instruction manual.

Location of controls (US, Canadian Model)

Refer to the pages listed for details.

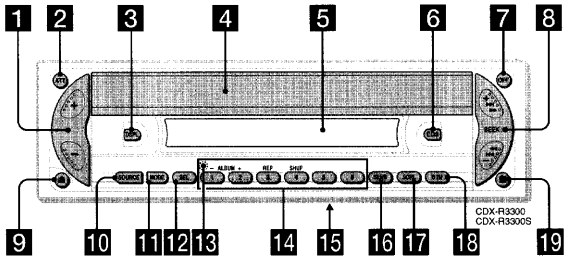


1 **Volume +/– button**
2 **ATT (attenuate) button** 14
3 **DSPL (display mode change) button** 10, 12
4 **OPEN/EJECT shutter** 11
5 **Display window**
6 **EQ3 button** 16
7 **OFF (Stop/Power off) button*** 9, 11
8 **SEEK +/– button**
Radio:
To tune in stations automatically/find a station manually.
CD (MP3 files):
To skip tracks/fast-forward, reverse a track.
9 ⏏ **(front panel release) button** 9
10 **SOURCE (Power on/Radio/CD) button**
To select the source.
11 **MODE button**
To change the operation.
12 **SEL (select) button**
To select items.
13 **RESET button** (located on the front side of the unit, behind the front panel) 9
14 **Number buttons** 15
Radio:
To store the desired station on each number button.
MP3 files:
①: **ALBUM –** 11
②: **ALBUM +** 11
CD:
③: **REP** 12
④: **SHUF** 12
15 **SENS button** 13
16 **SCRL (scroll) button** 12
17 **BTM button** 13
18 **Receptor for the card remote commander**

* **Warning when installing in a car without an ACC (accessory) position on the ignition switch**
After turning off the ignition, be sure to press and hold (OFF) on the unit until the display disappears.
Otherwise, the display does not turn off and this causes battery drain.

Location of controls (E Model)

Refer to the pages listed for details.

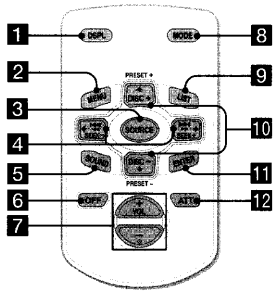


1 **Volume +/– button**
2 **ATT (attenuate) button** 16
3 **DSPL (display mode change) button** 10, 12
4 **OPEN/EJECT shutter** 11
5 **Display window**
6 **EQ3 button** 17, 18
7 **OFF (Stop/Power off) button*** 9, 11
8 **SEEK +/– button**
Radio:
To tune in stations automatically/find a station manually.
CD (MP3 files):
To skip tracks/fast-forward, reverse a track.
9 ⏏ **(front panel release) button** 9
10 **SOURCE (Power on/Radio/CD) button**
To select the source.
11 **MODE button**
To change the operation.
12 **SEL (select) button**
To select items.
13 **RESET button** (located on the front side of the unit, behind the front panel) 9
14 **Number buttons** 17
Radio:
To store the desired station on each number button.
MP3 files:
①: **ALBUM –** 11
②: **ALBUM +** 11
CD:
③: **REP** 12
④: **SHUF** 12
15 **Frequency select switch** (located on the bottom of the unit)
See "Frequency select switch" in the Installation/Connections manual.
16 **SENS button** 13
17 **SCRL (scroll) button** 12
18 **BTM button** 13
19 **Receptor for the card remote commander**

* **Warning when installing in a car without an ACC (accessory) position on the ignition switch**
After turning off the ignition, be sure to press and hold (OFF) on the unit until the display disappears.
Otherwise, the display does not turn off and this causes battery drain.

4

Card remote commander RM-X114 (optional)



The corresponding buttons of the card remote commander control the same functions as those on this unit.

1 **DSPL button**
2 **MENU button***1
3 **SOURCE button**
4 **SEEK (–/+) buttons**
5 **SOUND button**
6 **OFF button**
7 **VOL (+/–) buttons**
8 **MODE button**
9 **LIST button***1
10 **DISC***1 **(ALBUM)/PRESET (+/–) buttons**
11 **ENTER button***1
12 **ATT button**

*1 *Not available for this unit*

Note
If the display disappears by pressing (OFF), it cannot be operated with the card remote commander unless (SOURCE) on the unit is pressed, or a disc is inserted to activate the unit first.

Tip
For details on how to replace the battery, see "Replacing the lithium battery" on page 17.

Selecting an album with the card remote commander

Album can be skipped using the DISC (ALBUM) (+/–) buttons on the card remote commander.

To	Press
Skip albums*2 – Album selection	+ or – [once for each album] To continuously skip albums, press and hold either button.

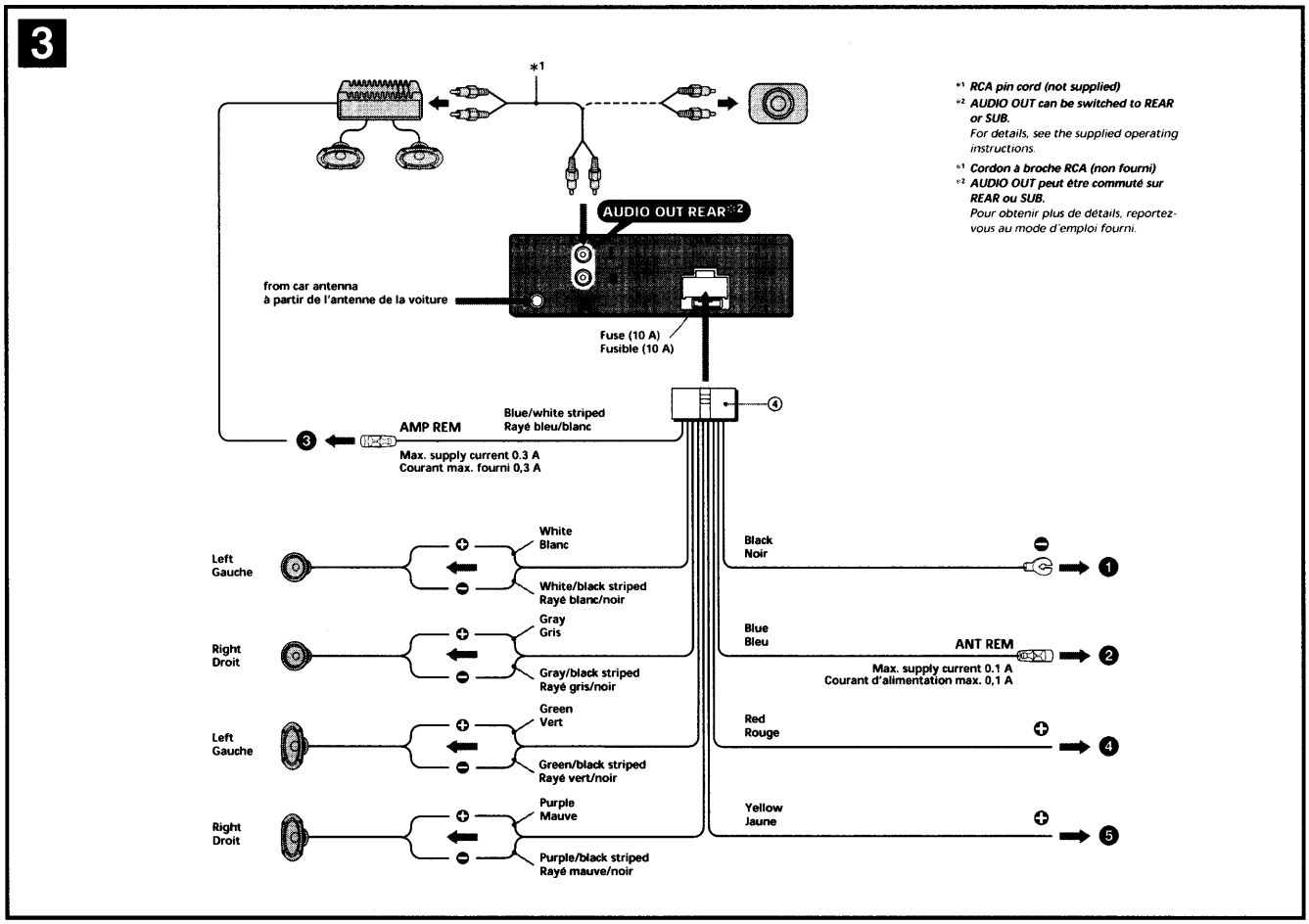
*2 *Available only when an MP3 file is played.*

Skipping tracks continuously

Press once (SEEK) (+) or (SEEK) (–) on the card remote commander, then press again within 2 seconds and hold.

5

Connections (US, Canadian Model)



Connection diagram (3)

❶ To a metal surface of the car
First connect the black ground lead, then connect the yellow and red power input leads.

❷ To the power antenna control lead or power supply lead of antenna booster amplifier

Notes
- *It is not necessary to connect this lead if there is no power antenna or antenna booster, or with a manually-operated telescopic antenna.*
- *When your car has a built-in FM/AM antenna in the rear/side glass, see "Notes on the control and power supply leads."*

❸ To AMP REMOTE IN of an optional power amplifier
This connection is only for amplifiers. Connecting any other system may damage the unit.

❹ To the +12 V power terminal which is energized in the accessory position of the ignition key switch

Notes
- *If there is no accessory position, connect to the +12 V power (battery) terminal which is energized at all times.*
  Be sure to connect the black ground lead to a metal surface of the car first.
- *When your car has a built-in FM/AM antenna in the rear/side glass, see "Notes on the control and power supply leads."*

❺ To the +12 V power terminal which is energized at all times
Be sure to connect the black ground lead to a metal surface of the car first.

Notes on the control and power supply leads
- *The power antenna control lead (blue) supplies +12 V DC when you turn on the tuner.*
- *When your car has built-in FM/AM antenna in the rear/side glass, connect the power antenna control lead (blue) or the accessory power input lead (red) to the power terminal of the existing antenna booster. For details, consult your dealer.*
- *A power antenna without relay box cannot be used with this unit.*

Memory hold connection
When the yellow power input lead is connected, power will always be supplied to the memory circuit even when the ignition key is turned off.

Notes on speaker connection
- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities to avoid its damage.*
- *Do not connect the speaker terminals to the car chassis, or connect the terminals of the right speakers with those of the left speaker.*
- *Do not connect the ground lead of this unit to the negative (–) terminal of the speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Connect only passive speakers. Connecting active speakers (with built-in amplifiers) to the speaker terminals may damage the unit.*
- *To avoid a malfunction, do not use the built-in speaker leads installed in your car if the unit shares a common negative (–) lead for the right and left speakers.*
- *Do not connect the unit's speaker leads to each other.*

Note on connection
If speaker and amplifier are not connected correctly, "FAILURE" appears in the display. In this case, make sure the speaker and amplifier are connected correctly.

Schéma de raccordement (3)

❶ À un point métallique de la voiture
Branchez d'abord le fil de masse noir et, ensuite, les fils d'entrée d'alimentation jaune et rouge.

❷ Vers le fil de commande de l'antenne électrique ou le fil d'alimentation de l'amplificateur d'antenne

Remarques
- *Il n'est pas nécessaire de raccorder ce fil s'il n'y a pas d'antenne électrique ni d'amplificateur d'antenne, ou avec une antenne télescopique manuelle.*
- *Si votre voiture est équipée d'une antenne FM/AM intégrée dans la vitre arrière/latérale, voir « Remarques sur les fils de commande et d'alimentation ».*

❸ Au niveau du AMP REMOTE IN de l'amplificateur de puissance en option
Ce raccordement s'applique uniquement aux amplificateurs. Le branchement de tout autre système risque d'endommager l'appareil.

❹ À la borne +12 V qui est alimentée quand la clé de contact est sur la position accessoires

Remarques
- *S'il n'y a pas de position accessoires, raccordez la borne d'alimentation (batterie) +12 V qui est alimentée en permanence.*
  Raccordez d'abord le fil de masse noir à un point métallique du véhicule.
- *Si votre voiture est équipée d'une antenne FM/AM intégrée dans la vitre arrière/latérale, voir « Remarques sur les fils de commande et d'alimentation ».*

❺ À la borne +12 V qui est alimentée en permanence
Raccordez d'abord le fil de masse noir à un point métallique du véhicule.

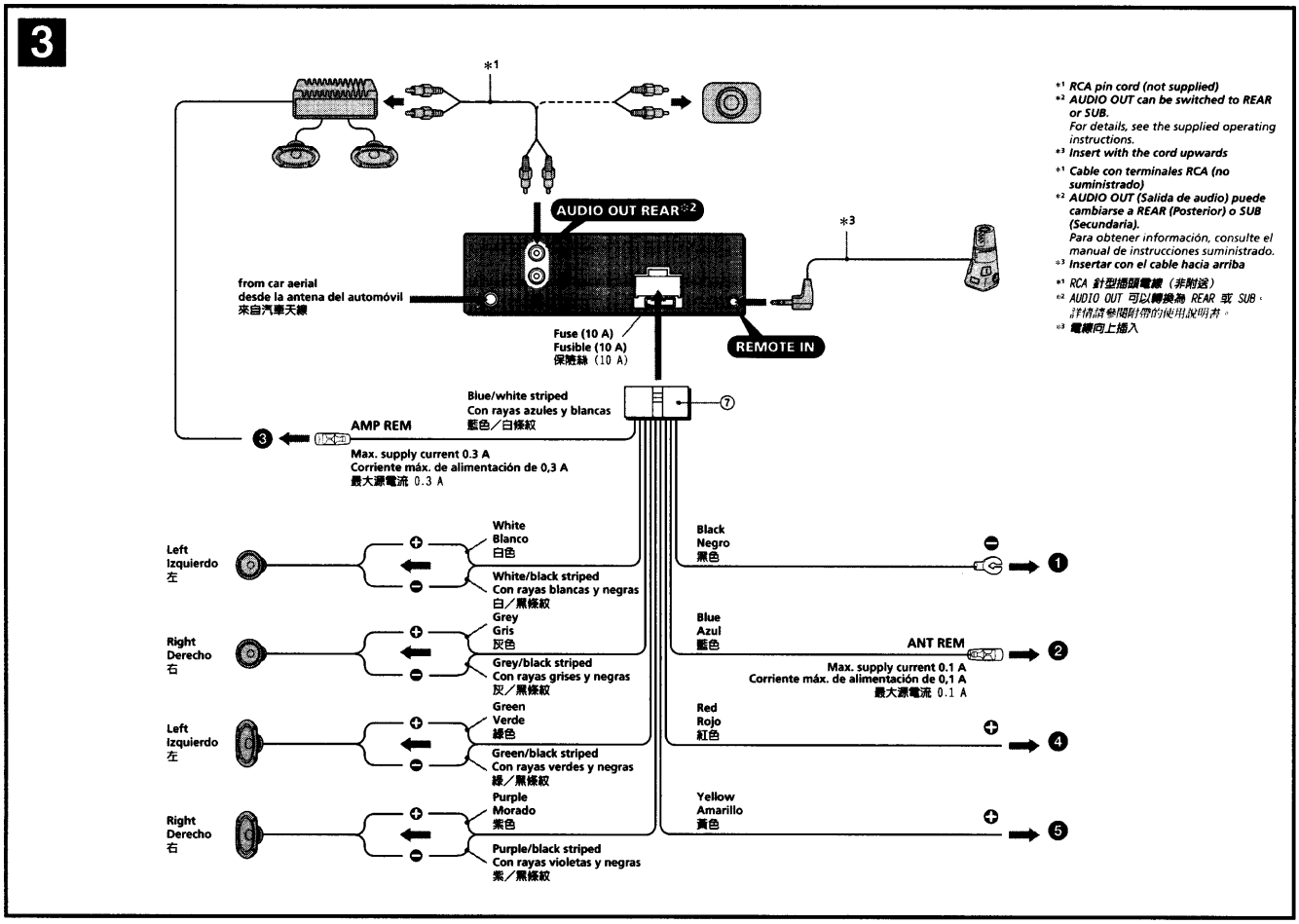
Remarques sur les fils de commande et d'alimentation
- *Le fil de commande de l'antenne électrique (bleu) fournit une alimentation de + 12 V CC lorsque vous mettez la radio sous tension.*
- *Lorsque votre voiture est équipée d'une antenne FM/AM intégrée dans la vitre arrière/latérale, raccordez le fil de commande de l'antenne (bleu) ou l'entrée d'alimentation des accessoires (rouge) à la borne d'alimentation de l'amplificateur d'antenne existant. Pour plus de détails, consultez votre détaillant.*
- *Une antenne électrique sans boîtier de relais ne peut pas être utilisée avec cet appareil.*

Raccordement pour la conservation de la mémoire
Lorsque le fil d'entrée d'alimentation jaune est raccordé, le circuit de la mémoire est alimenté en permanence même si la clé de contact est sur la position d'arrêt.

Remarques sur le raccordement des haut-parleurs
- *Avant de raccorder les haut-parleurs, mettez l'appareil hors tension.*
- *Utilisez des haut-parleurs ayant une impédance de 4 à 8 ohms avec une capacité électrique adéquate pour éviter de les endommager.*
- *Ne raccordez pas les bornes du système de haut-parleurs au châssis de la voiture et ne raccordez pas les bornes des haut-parleurs droit à celles du haut-parleur gauche.*
- *Ne raccordez pas le câble de masse de cet appareil à la borne négative (–) de l'enceinte.*
- *N'essayez pas de raccorder les haut-parleurs en parallèle.*
- *Raccordez uniquement des haut-parleurs passifs. Le raccordement de haut-parleurs actifs (avec amplificateurs intégrés) aux bornes des haut-parleurs peut endommager l'appareil.*
- *Pour éviter tout dysfonctionnement, n'utilisez pas les fils des haut-parleurs intégrés installés dans votre voiture si l'appareil partage un fil négatif commun (–) pour les haut-parleurs droit et gauche.*
- *Ne raccordez pas entre eux les cordons des haut-parleurs de l'appareil.*

Remarque sur le raccordement
Si les haut-parleurs et l'amplificateur ne sont pas raccordés correctement, le message « FAILURE » s'affiche. Dans ce cas, assurez-vous que les haut-parleurs et l'amplificateur sont bien raccordés.

Connections (E Model)



*1 *RCA pin cord (not supplied)*
*2 *AUDIO OUT can be switched to REAR or SUB.*
For details, see the supplied operating instructions.
*3 *Insert with the cord upwards*
*1 *Cable con terminales RCA (no suministrado)*
*2 *AUDIO OUT (Salida de audio) puede cambiarse a REAR (Posterior) o SUB (Secundaria).*
Para obtener información, consulte el manual de instrucciones suministrado.
*3 *Insertar con el cable hacia arriba*
*1 *RCA 針型插頭電線（非附送）*
*2 *AUDIO OUT 可以轉換為 REAR 或 SUB。詳情請參閱附帶的使用說明書。*
*3 *電線向上插入*

Connection diagram (3)

❶ **To a metal surface of the car**
First connect the black earth lead, then connect the yellow and red power input leads.

❷ **To the power aerial control lead or power supply lead of aerial booster amplifier**

Notes
- *It is not necessary to connect this lead if there is no power aerial or aerial booster, or with a manually-operated telescopic aerial.*
- *When your car has a built-in FM/AM aerial in the rearlside glass, see "Notes on the control and power supply leads."*

❸ **To AMP REMOTE IN of an optional power amplifier**
This connection is only for amplifiers. Connecting any other system may damage the unit.

❹ **To the +12 V power terminal which is energized in the accessory position of the ignition key switch**

Notes
- *If there is no accessory position, connect to the +12 V power (battery) terminal which is energized at all times.*
  Be sure to connect the black earth lead to a metal surface of the car first.
- *When your car has a built-in FM/AM aerial in the rearlside glass, see "Notes on the control and power supply leads."*

❺ **To the +12 V power terminal which is energized at all times**
Be sure to connect the black earth lead to a metal surface of the car first.

Notes on the control and power supply leads
- *The power aerial control lead (blue) supplies +12 V DC when you turn on the tuner.*
- *When your car has built-in FM/AM aerial in the rearl side glass, connect the power aerial control lead (blue) or the accessory power input lead (red) to the power terminal of the existing aerial booster. For details, consult your dealer.*
- *A power aerial without relay box cannot be used with this unit.*

Memory hold connection
When the yellow power input lead is connected, power will always be supplied to the memory circuit even when the ignition key is turned off.

Notes on speaker connection
- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities to avoid its damage.*
- *Do not connect the speaker terminals to the car chassis, or connect the terminals of the right speakers with those of the left speaker.*
- *Do not connect the earth lead of this unit to the negative (–) terminal of the speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Connect only passive speakers. Connecting active speakers (with built-in amplifiers) to the speaker terminals may damage the unit.*
- *To avoid a malfunction, do not use the built-in speaker leads installed in your car if the unit shares a common negative (–) lead for the right and left speakers.*
- *Do not connect the unit's speaker leads to each other.*

Note on connection
If speaker and amplifier are not connected correctly, "FAILURE" appears in the display. In this case, make sure the speaker and amplifier are connected correctly.

Diagrama de conexión (3)

❶ **A una superficie metálica del automóvil**
Conecte primero el cable de toma a tierra negro, y después los cables amarillo y rojo de entrada de alimentación.

❷ **Al cable de control de la antena motorizada o al cable de fuente de alimentación del amplificador de antena**
Notas
- *Si no se dispone de antena motorizada ni de amplificador de antena, o se utiliza una antena telescópica accionada manualmente, no será necesario conectar este cable.*
- *Si el automóvil incorpora una antena de FM/AM en el cristal trasero o lateral, consulte "Notas sobre los cables de control y de fuente de alimentación".*

❸ **Para conectar a AMP REMOTE IN del amplificador de potencia opcional**
Esta conexión es sólo para amplificadores. La conexión de cualquier otro sistema puede dañar la unidad.

❹ **Al terminal de alimentación de +12 V que recibe energía en la posición de accesorio del interruptor de la llave de encendido**
Notas
- *Si no hay posición de accesorio, conéctelo al terminal de alimentación (batería) de +12 V que recibe energía sin interrupción.*
  Asegúrese de conectar primero el cable de toma a tierra negro a una superficie metálica del automóvil.
- *Si el automóvil incorpora una antena de FM/AM en el cristal trasero o lateral, consulte "Notas sobre los cables de control y de fuente de alimentación".*

❺ **Al terminal de alimentación de +12 V que recibe energía sin interrupción**
Asegúrese de conectar primero el cable de toma a tierra negro a una superficie metálica del automóvil.

Notas sobre los cables de control y de fuente de alimentación
- *El cable de control de la antena motorizada (azul) suministrará cc de + 12 V cuando conecte la alimentación del sintonizador.*
- *Si el automóvil dispone de una antena de FM/AM incorporada en el cristal trasero o lateral, conecte el cable de control de antena motorizada (azul) o el cable de entrada de alimentación auxiliar (rojo) al terminal de alimentación del amplificador de antena existente. Para obtener más información, consulte a su proveedor.*
- *Con esta unidad no es posible utilizar una antena motorizada sin caja de relé.*

Conexión para protección de la memoria
Si conecta el conductor de entrada amarillo, el circuito de la memoria recibirá siempre alimentación, aunque ponga la llave de encendido en la posición OFF.

Notas sobre la conexión de los altavoces
- *Antes de conectar los altavoces, desconecte la alimentación de la unidad.*
- *Utilice altavoces con una impedancia de 4 a 8 Ω con la capacidad de potencia adecuada para evitar que se dañen.*
- *No conecte los terminales de altavoz al chasis del automóvil, ni conecte los terminales del altavoz derecho con los del izquierdo.*
- *No conecte el cable de toma a tierra de esta unidad al terminal negativo (–) del altavoz.*
- *No intente conectar los altavoces en paralelo.*
- *Conecte solamente altavoces pasivos. Si conecta altavoces activos (con amplificadores incorporados) a los terminales de altavoz, puede dañar la unidad.*
- *Para evitar fallos de funcionamiento, no utilice los cables de altavoz incorporados instalados en el automóvil si su unidad comparte un cable negativo común (–) para los altavoces derecho e izquierdo.*
- *No conecte los cables de altavoz de la unidad entre sí.*

Nota sobre la conexión
Si el altavoz y el amplificador no están conectados correctamente, aparecerá "FAILURE" en la pantalla. Si es así, compruebe la conexión de ambos dispositivos.

線路連接圖（3）

❶ **連接至汽車的金屬表面**
首先連接黑色接地導線，然後再連接黃色和紅色電源輸入導線。

❷ **連接至電動天線控制導線或天線升壓放大器的電源導線**

註
- *如無電動天線或天線升壓器，或有手動套管式天線，便不須連接此導線。*
- *您汽車的後／側玻璃窗中如果有內置 FM/AM 天線，即請參看 "控制線和電源線須知"。*

❸ **連接至選購的功率放大器的 AMP REMOTE IN（放大器遙控輸入）**
本連接僅用於放大器。連接任何其它系統可能會損壞本機。

❹ **連接至在點火鑰匙開關的附件位置上通電的 +12 V 電源端子**

註
- *若沒有附件位置，則請連接至始終通電的 +12 V 電源（電池）端子。*
  必須首先將黑色接地導線連接至汽車的金屬表面。
- *您汽車的後／側玻璃窗中如果有內置 FM/AM 天線，即請參看 "控制線和電源線須知"。*

❺ **連接至始終通電的 +12 V 電源端子**
必須首先將黑色接地導線連接至汽車的金屬表面。

控制線和電源線須知
- *接通調諧器電源時，電動天線的控制導線（藍色）便能提供 +12 V 直流電。*
- *若您的汽車後／側玻璃窗上有內置 FM/AM 天線，須將電動天線控制導線（藍色）或輔助電源輸入導線（紅色）連接到現有天線升壓器的電源端子上。詳細內容請向銷售商諮詢。*
- *本機不能使用不具備繼電器盒的電動天線。*

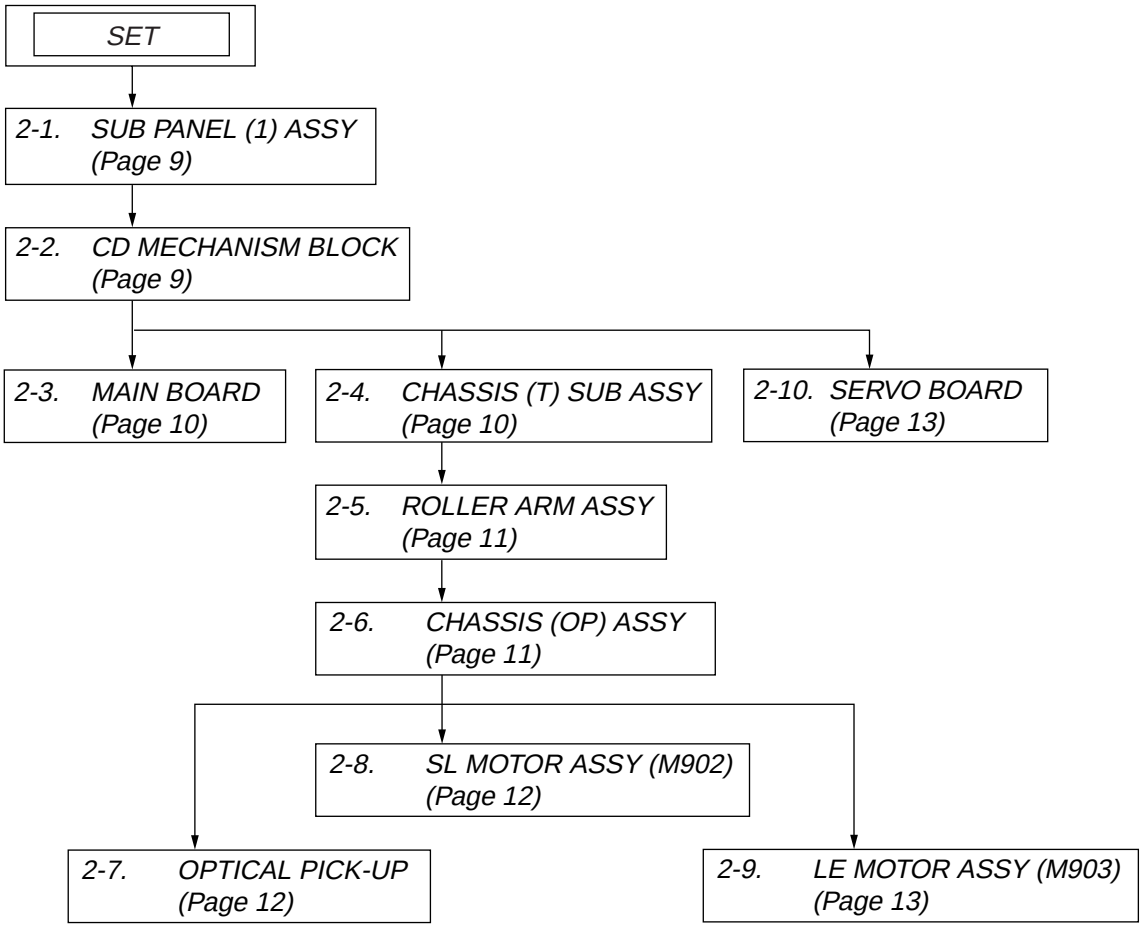
保持記憶的線路連接法
當連接好黃色電源輸入導線時，即使汽車發動機點火鑰匙關閉，電源仍將對記憶電路供電。

連接揚聲器時的注意事項
- *連接揚聲器電線以前，請先關閉本機電源。*
- *使用阻抗爲 4–8Ω 且具有足夠功率處理容量的揚聲器，以免損壞揚聲器。*
- *不要將揚聲器端子連接到車身上，或將右揚聲器端子與左揚聲器端子相連接。*
- *切勿將本機的接地導線連接至揚聲器的負（–）接線端。*
- *揚聲器不可並聯連接。*
- *請僅連接無源揚聲器。若將有源揚聲器（帶內置放大器）連接到揚聲器端子上會損壞本機。*
- *若本裝置使用左、右揚聲器的共用負極（–）導線，爲了避免故障，切勿使用已安裝在汽車內的內置揚聲器導線。*
- *請勿將本裝置揚聲器導線相互連接。*

有關連接注意事項
如果未正確連接揚聲器和放大器，則顯示幕上會出現 "FAILURE"。此時，請正確連接揚聲器和放大器。

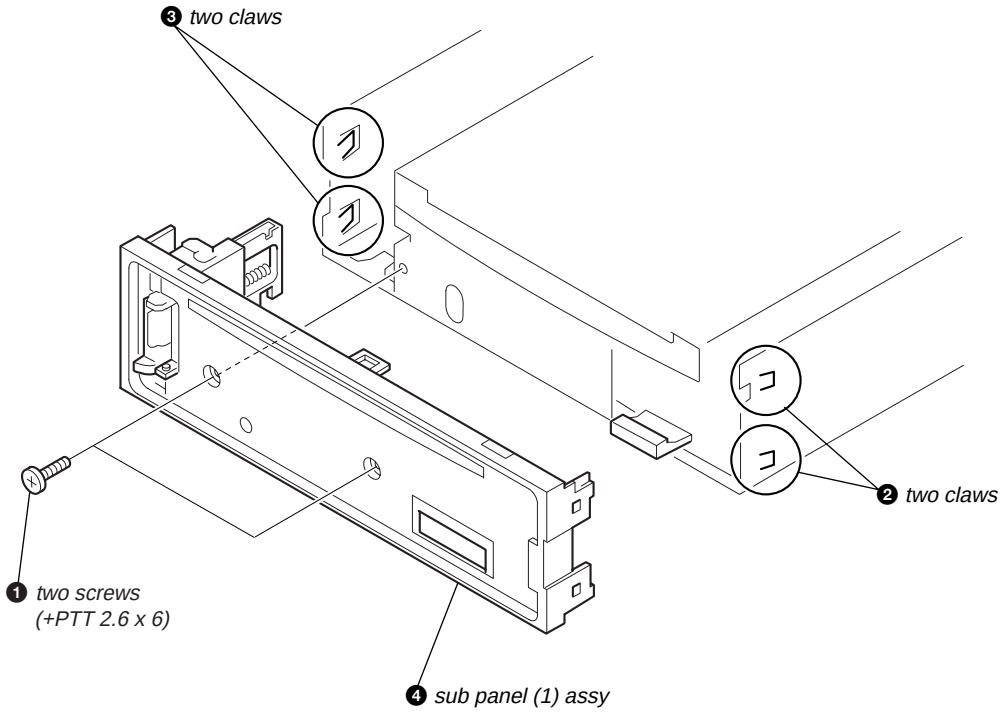
SECTION 2
DISASSEMBLY

Note : This set can be disassemble according to the following sequence.

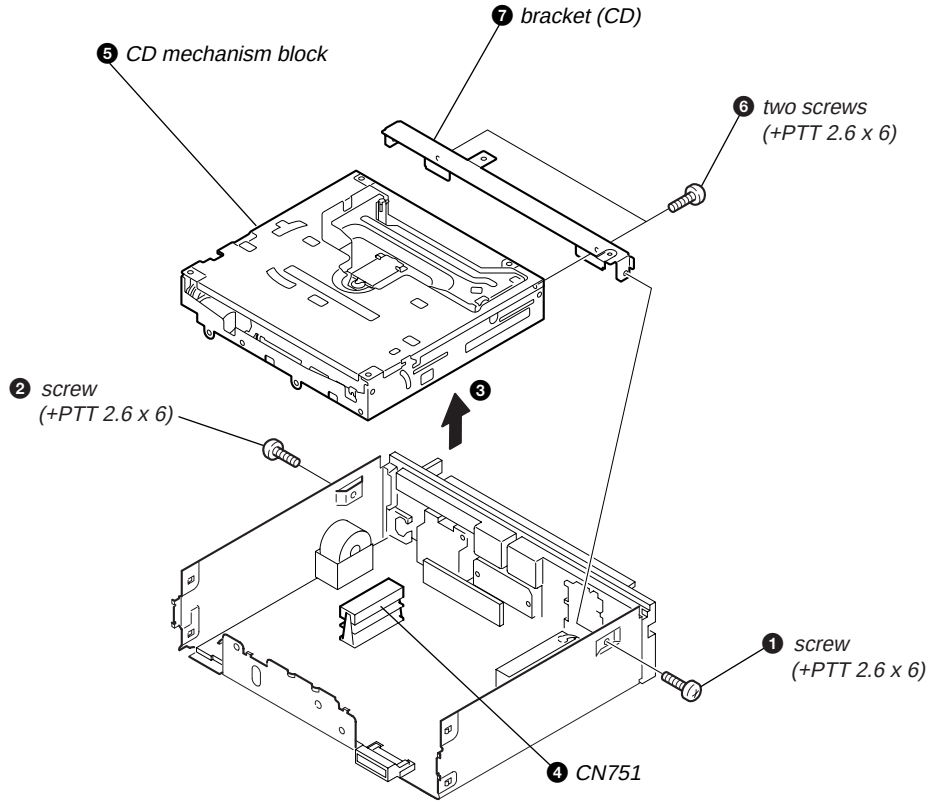

SET
2-1. SUB PANEL (1) ASSY (Page 9)
2-2. CD MECHANISM BLOCK (Page 9)
2-3. MAIN BOARD (Page 10)
2-4. CHASSIS (T) SUB ASSY (Page 10)
2-10. SERVO BOARD (Page 13)
2-5. ROLLER ARM ASSY (Page 11)
2-6. CHASSIS (OP) ASSY (Page 11)
2-8. SL MOTOR ASSY (M902) (Page 12)
2-7. OPTICAL PICK-UP (Page 12)
2-9. LE MOTOR ASSY (M903) (Page 13)

Note : Follow the disassembly procedure in the numerical order given.

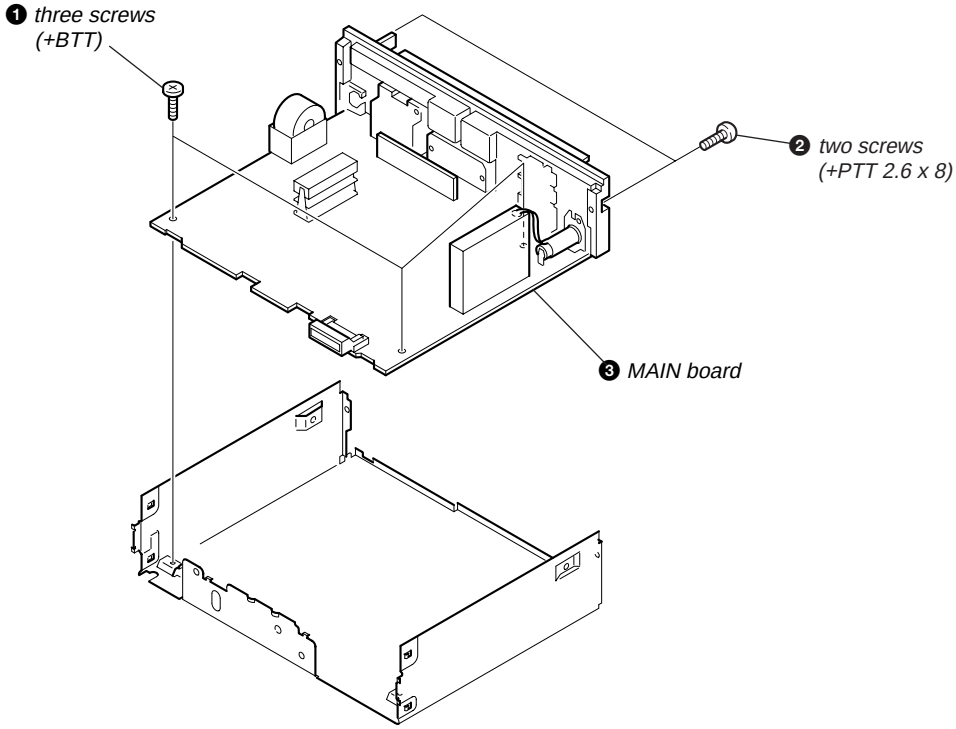
2-1. SUB PANEL (1) ASSY



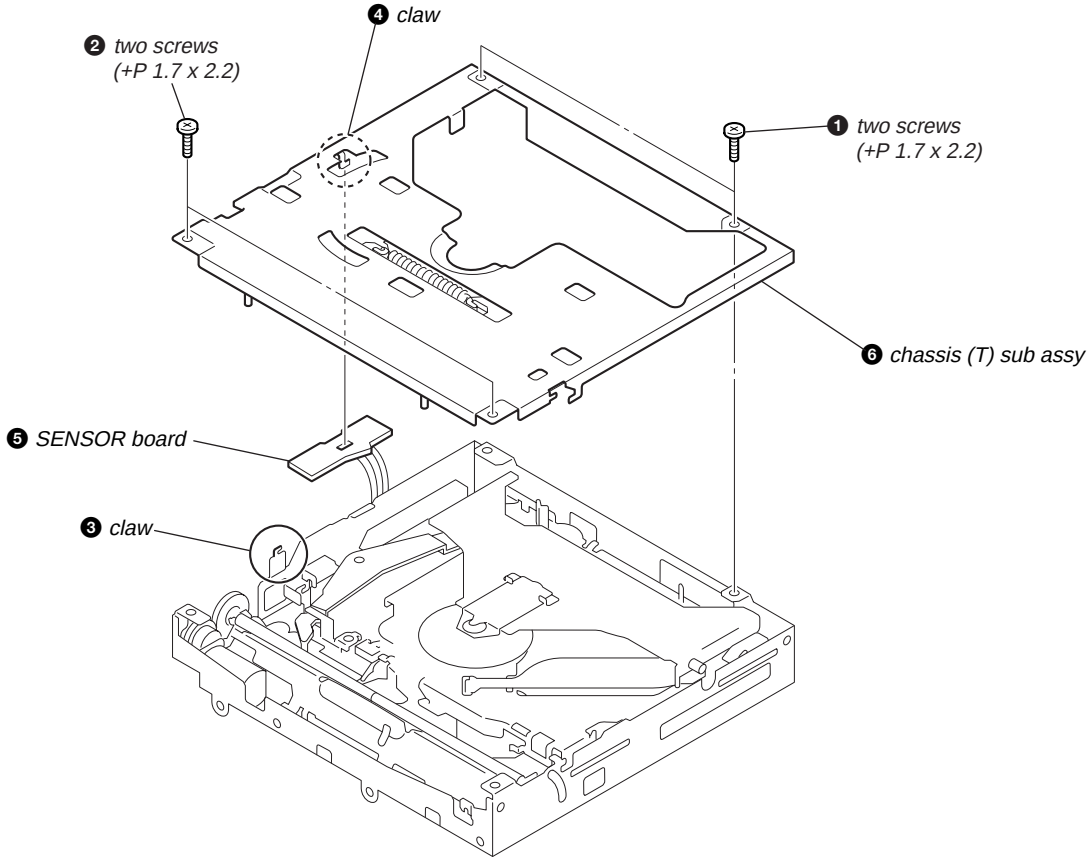
2-2. CD MECHANISM BLOCK



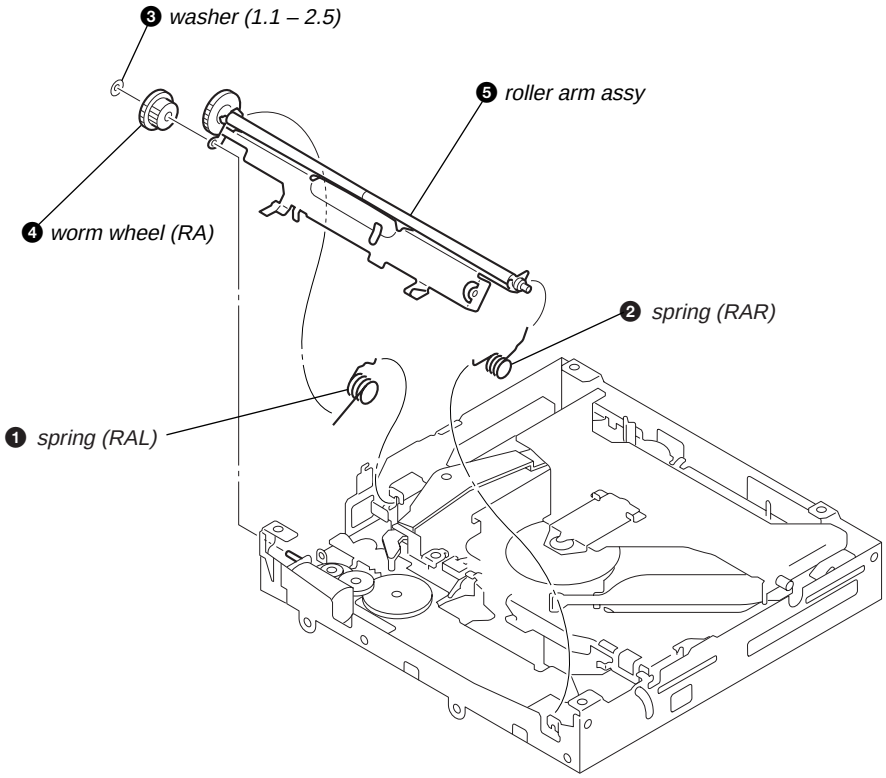
2-3. MAIN BOARD



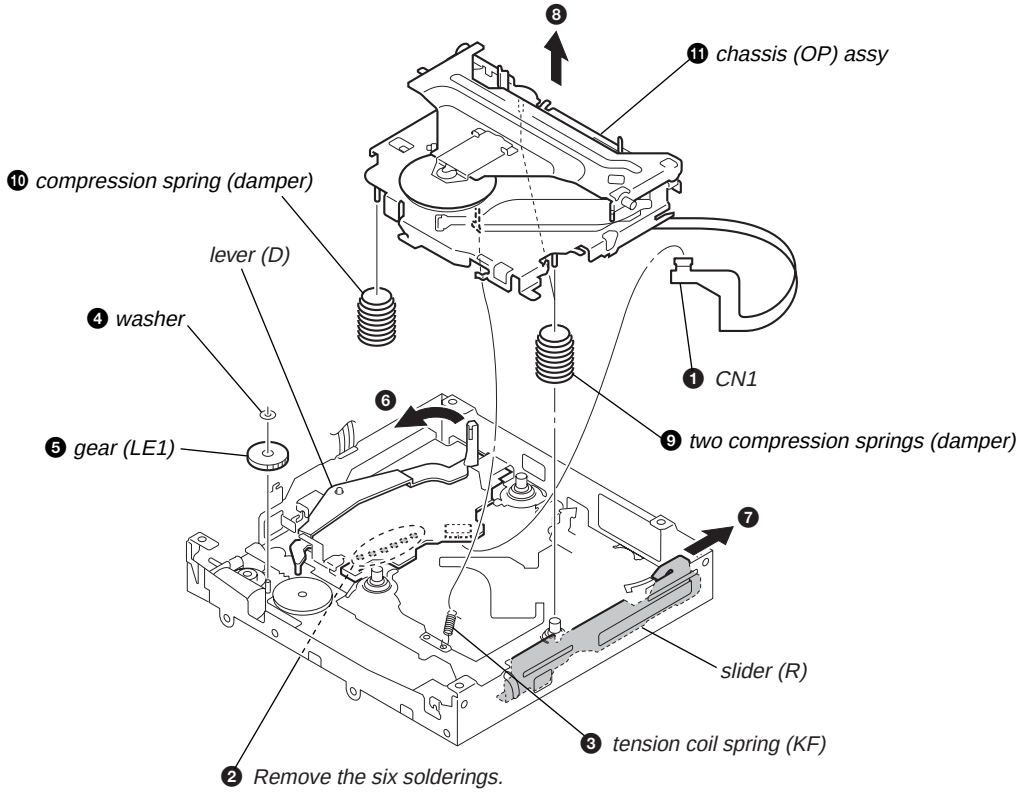
2-4. CHASSIS (T) SUB ASSY



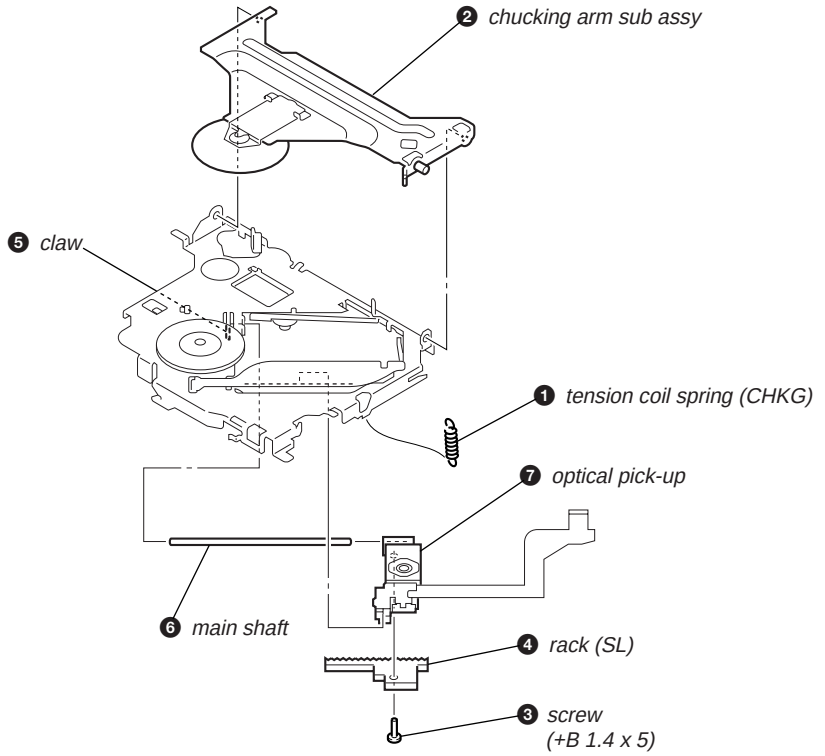
2-5. ROLLER ARM ASSY



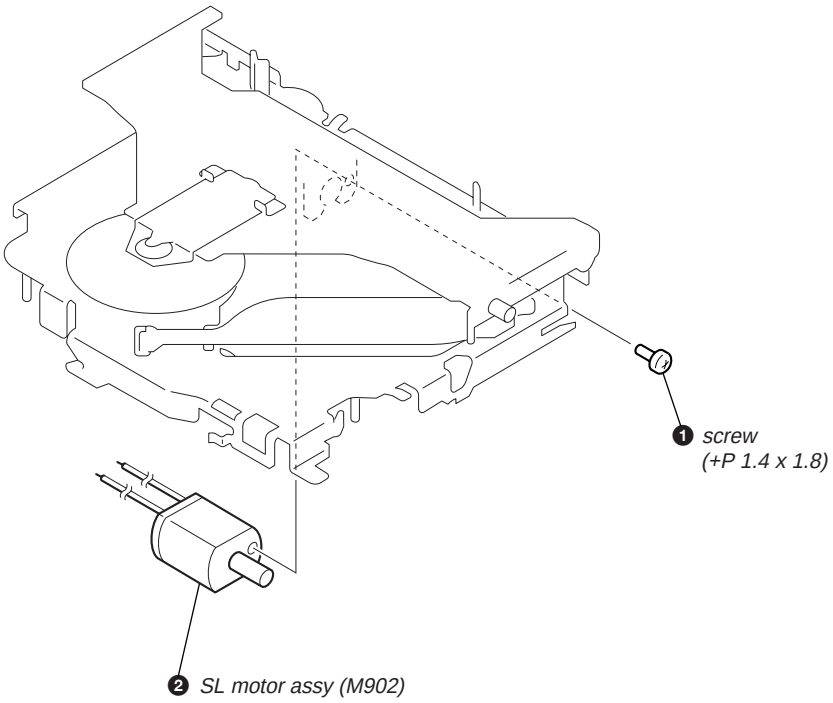
2-6. CHASSIS (OP) ASSY



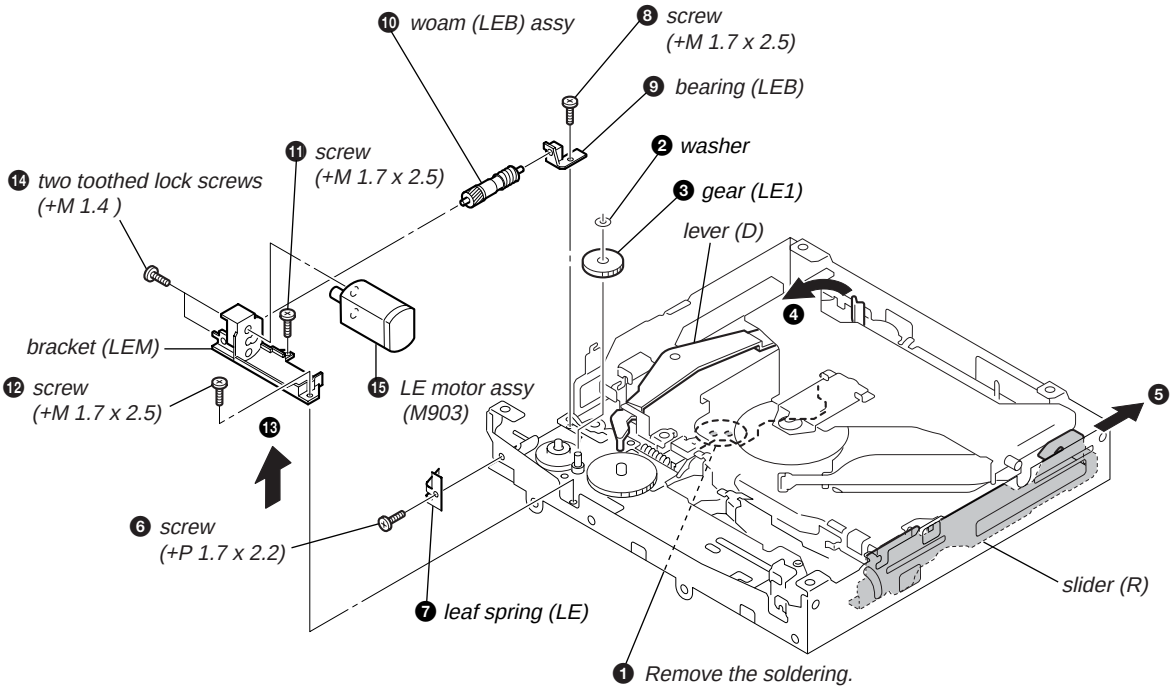
2-7. OPTICAL PICK-UP



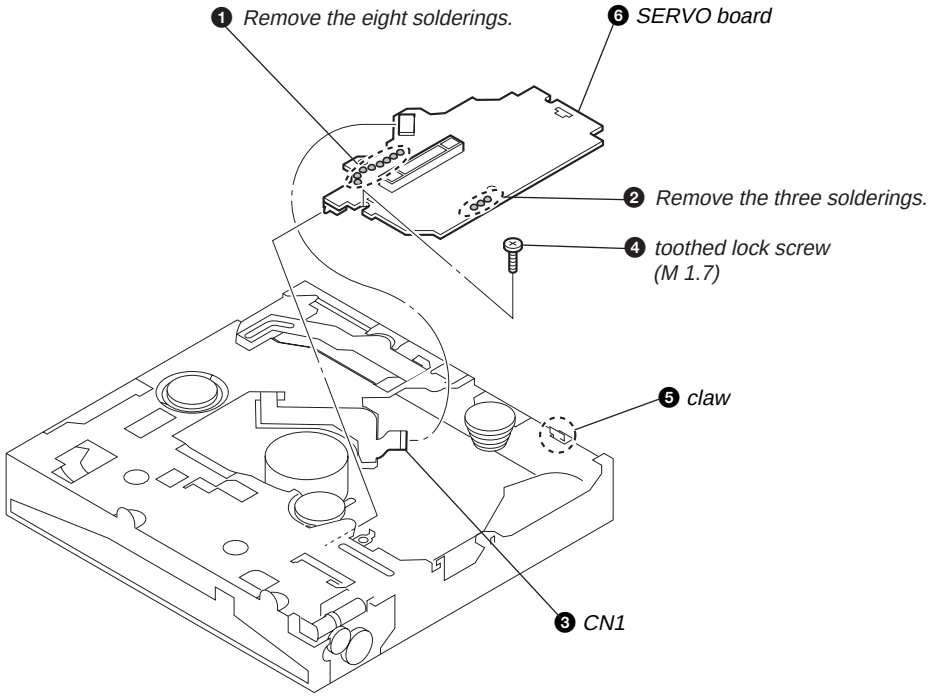
2-8. SL MOTOR ASSY (M902)



2-9. LE MOTOR ASSY (M903)



2-10. SERVO BOARD



SECTION 3
DIAGRAMS

3-1. IC PIN DESCRIPTIONS

• IC3 CXD3059AR (DIGITAL SERVO/DIGITAL SIGNAL PROCESSOR) (SERVO BOARD (1/2))

Pin No.	Pin Name	I/O	Pin Description
1	MIRR	I/O	Mirrer signal input/output
2	DFCT	I/O	Defect signal input/output
3	FOK	I/O	Focus OK signal input/output
4	VSS	—	Ground pin
5	LOCK	I/O	Not used in this set. (Open)
6	MDP	O	Spindle motor servo control signal output
7	SSTP	I	Disc most inner detection signal input
8	IOVSS1	—	Digital ground pin for I/O
9	SFDR	O	Sled drive signal output
10	SRDR	O	Sled drive signal output
11	TFDR	O	Tracking drive signal output
12	TRDR	O	Tracking drive signal output
13	FFDR	O	Focus drive signal output
14	FRDR	O	Focus drive signal output
15	IOVDD1	—	Digital power supply pin for I/O
16	AVDD0	—	Analog power supply pin
17	AVSS0	—	Analog ground pin
18	NC	—	Not used. (Open)
19	E	I	E signal input
20	F	I	F signal input
21	TEI	I	Tracking error signal input from the DSSP block
22	TEO	O	Tracking error signal output to the RF amp block
23	FEI	I	Focus error signal input from the DSSP block
24	FEO	O	Focus error signal output to the RF amp block
25	VC	I/O	VC voltage output to the RF amp block Center voltage input from the DSSP block by command select
26	A	I	A signal input
27	B	I	B signal input
28	C	I	C signal input
29	D	I	D signal input
30	NC	—	Not used. (Open)
31	AVDD4	—	Analog power supply pin
32	RFDCO	I/O	RFDC signal output RFDC signal input from the DSSP block by command select
33	PDSENS	I	Reference voltage input for PD
34	AC SUM	O	RFAC suming amp signal output
35	EQ IN	I	Equalizer circuit signal input
36	LD	O	APC amp signal output
37	PD	I	APC amp signal input
38	NC	—	Not used. (Open)
39	RFC	I	EQ cut off frequency adjustment input
40	AVSS4	—	Analog ground pin
41	RFACO	O	RFAC signal output
42	RFACI	I	RFAC signal input or EFM signal input
43	AVDD3	—	Analog power supply pin
44	BIAS	I	Asymmetry circuit constant current input
45	ASYI	I	Asymmetry comparate voltage input
46	ASYO	O	EFM full swing signal output
47	VPCO	O	Charge pump output for wideband EFM PLL
48	VCTL	I	VCO2 control voltage input for wideband EFM PLL
49	AVSS3	—	Analog ground pin

Pin No.	Pin Name	I/O	Pin Description
50	CLTV	I	VCO1 control voltage input
51	FILO	O	Filter signal output for master PLL
52	FILI	I	Filter signal input for master PLL
53	PCO	O	Charge pump output for master PLL
54	AVDD5	—	Analog power supply pin
55	DDVROUT	O	DC/DC converter output
56	DDVRSEN	I	DC/DC converter output voltage monitor signal input
57	AVSS5	—	Analog ground pin
58	DDCR	I	Reset signal input for DC/DC converter
59	NC	—	Not used. (Open)
60	BCKI	I	D/A interface bit clock signal input
61	PCMDI	I	D/A interface serial data signal input
62	LRCKI	I	D/A interface LR clock signal input
63	LRCK	O	D/A interface LR clock signal output
64	VSS	—	Digital ground pin for internal
65	PCMD	O	D/A interface serial data signal output
66	BCK	O	D/A interface bit clock signal output
67	VDD	—	Digital power supply pin for internal
68	EMPH	O	Not used in this set. (Open)
69	EMPHI	I	Not used in this set. (Fixed at “L”.)
70	IOVDD2	—	Digital power supply pin for I/O
71	DOUT	O	Digital out signal output
72, 73	TEST	I	Test pin Normally “L”.
74	IOVSS2	—	Digital ground pin for I/O
75	NC	—	Not used in this set. (Open)
76	XVSS	—	Ground pin for master clock
77	XTAO	O	Crystal oscillation circuit output (16.9344 MHz)
78	XTAI	I	Crystal oscillation circuit input (16.9344 MHz)
79	XVDD	—	Power supply pin for master clock
80	AVDD1	—	Analog power supply pin
81	AOUT1	O	L channel analog signal output
82	VREFL	O	L channel reference voltage output
83	AVSS1	—	Analog ground pin
84	AVSS2	—	Analog ground pin
85	VREFR	O	R channel reference voltage output
86	AOUT2	O	R channel analog signal output
87	AVDD2	—	Analog power supply pin
88	NC	—	Not used. (Open)
89	IOVDD0	—	Digital power supply pin for I/O
90	RMUT	O	R channel “0” detection flug output
91	LMUT	O	L channel “0” detection flug output
92	NC	—	Not used. (Open)
93	XTSL	I	X’tal select signal input 16.9344 MHz: “L”, 33.8688 MHz: “H”
94	IOVSS0	—	Digital ground pin for I/O
95	XTACN	I	Oscillation circuit control input “H”: Oscillation start, “L”: Oscillation stop
96	SQSO	O	Sub 80 bit and PCM peak, level data signal output CD text data signal output
97	SQCK	I	Clock signal input for SQSO read out
98	SBSO	O	Sub P-W serial data signal output Not used in this set. (Open)
99	EXCK	I	Clock signal input for SBSO read out Not used in this set. (Open)
100	XRST	I	System reset signal input “L”: reset
101	SYSM	I	Mute signal input “H”: mute Not used in this set. (Fixed at “L”.)
102	DATA	I	Serial data signal input
103	VSS	—	Digital ground pin for internal

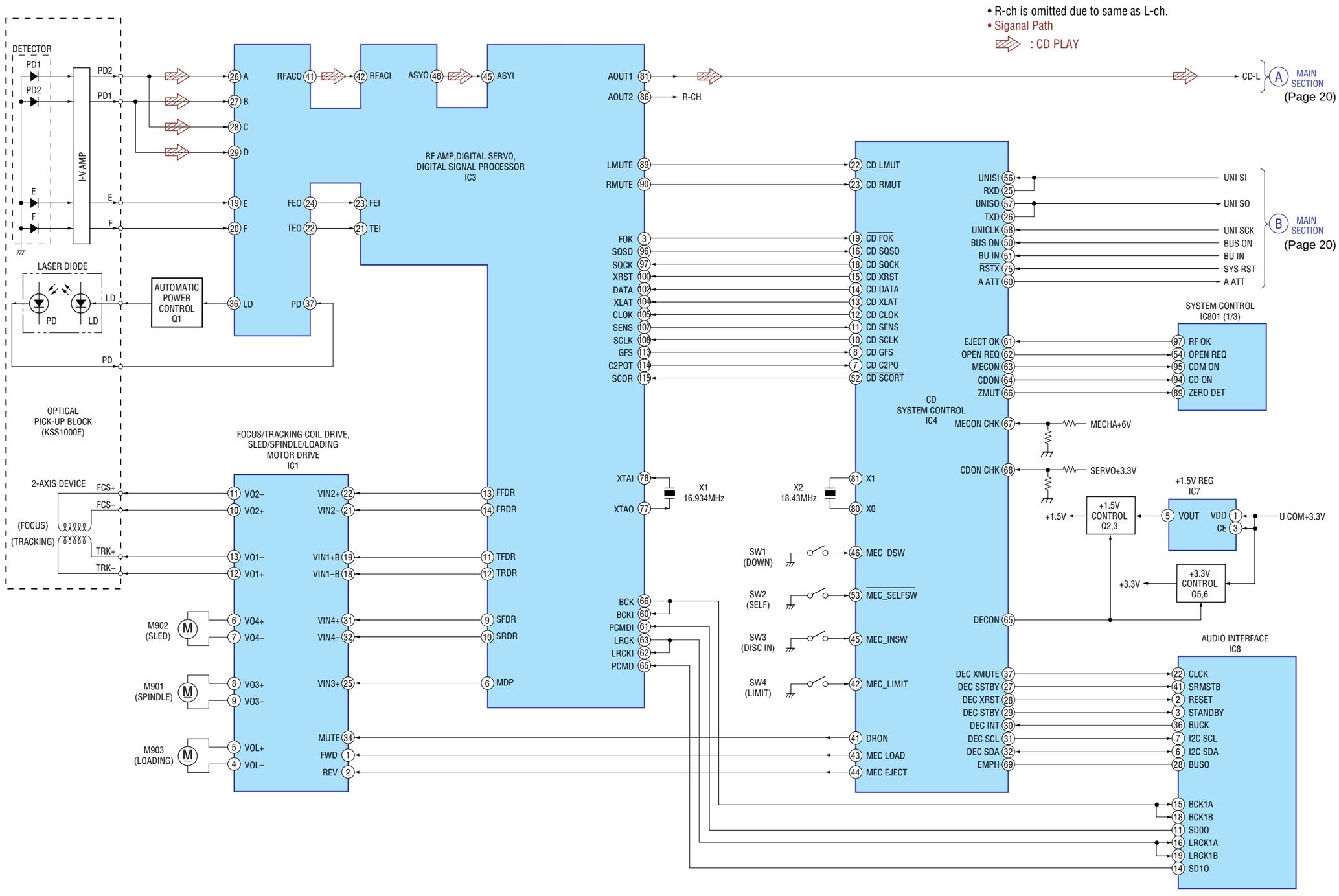
Pin No.	Pin Name	I/O	Pin Description
104	XLAT	I	Latch signal input
105	CLOK	I	Serial data transfer clock signal input
106	VDD	—	Digital power supply pin for internal
107	SENS	O	SENS signal output
108	SCLK	I	Clock signal input for SENS serial data read out
109	ATSK	I/O	Input/output for anti-shock
110	WFCK	O	WFCK signal output Not used in this set. (Open)
111	XUGF	O	XUGF signal output Not used in this set. (Open)
112	XPCK	O	XPCK signal output Not used in this set. (Open)
113	GFS	O	GFS signal output
114	C2PO	O	C2PO signal output
115	SCOR	O	Sub code sync signal output
116	VDD	—	Digital power supply pin for internal
117	C4M	O	4.2336 MHz signal output Not used in this set. (Open)
118	WDCK	O	Word clock signal output Not used in this set. (Open)
119	COUT	I/O	Track count signal input/output Not used in this set. (Open)
120	NC	—	Not used. (Open)

• IC801 MB90467PF-G-104-BNDE1 (SYSTEM CONTROL) (MAIN BOARD (2/2))

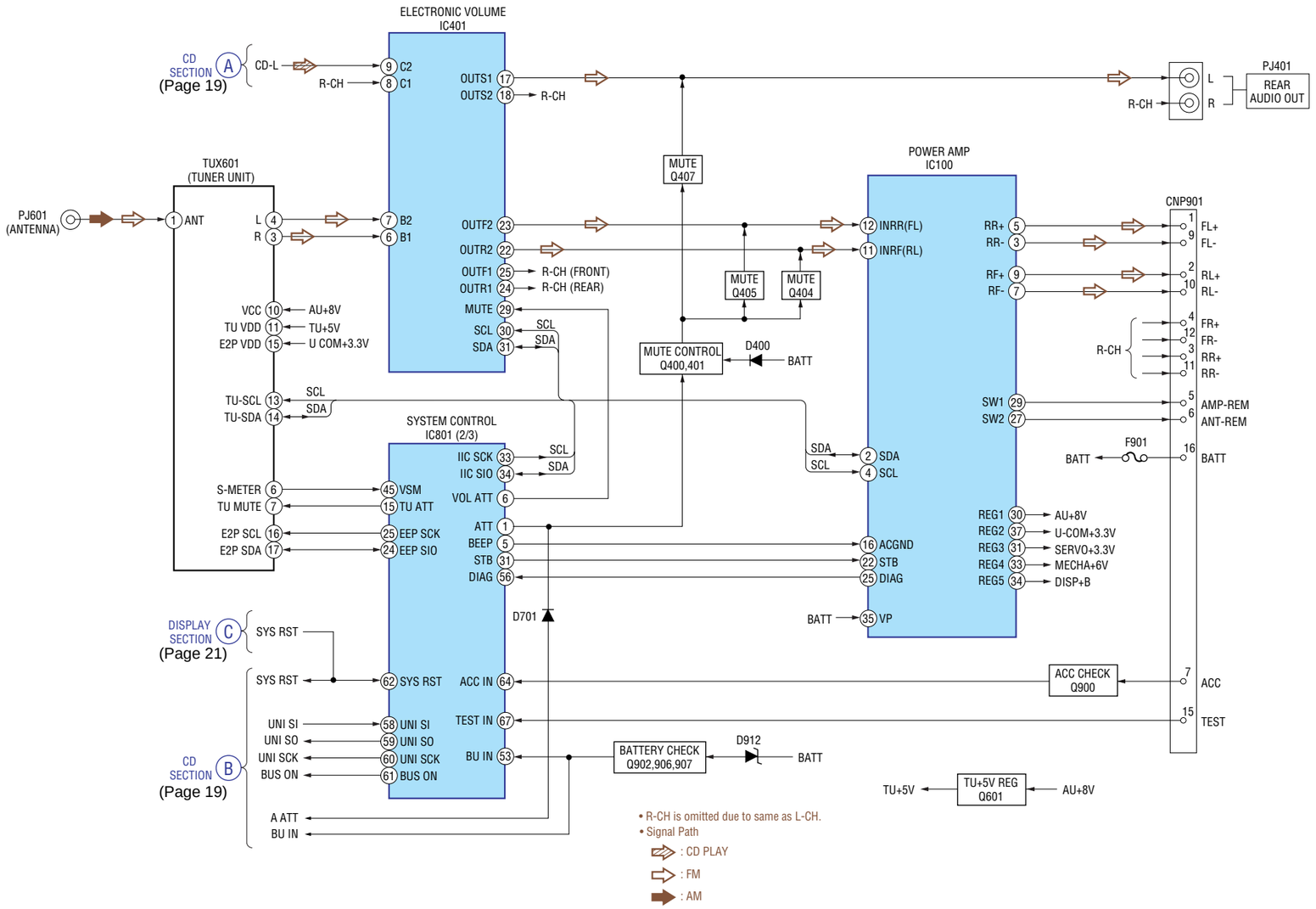
Pin No.	Pin Name	I/O	Pin Description
1	ATT	O	Audio mute control signal output
2 to 4	NC	—	Not used in this set. (Open)
5	BEEP	O	Beep signal output to power amp IC
6	VOL ATT	O	Electrical volume ATT control output
7 to 10	NC	—	Not used in this set. (Open)
11	VSS	—	Ground pin
12 to 14	NC	—	Not used in this set. (Open)
15	TU ATT	O	Tuner mute control output
16, 17	NC	—	Not used in this set. (Open)
18	CD SI	I	CD servo serial data signal input Not used in this set. (Open)
19	CD SO	O	CD servo serial data signal output Not used in this set. (Open)
20	CD SCK	O	CD servo serial clock signal output Not used in this set. (Open)
21	RE 0	I	Rotary encoder signal input Not used in this set.
22	RE 1	I	Rotary encoder signal input Not used in this set.
23	VCC+3.3	—	Power supply pin (+3.3 V)
24	EEP SIO	I/O	Serial data signal input/output for EEPROM communication
25	EEP SCK	O	Serial clock signal output for EEPROM communication
26	SHUT SW	I	Shutter switch open/close detect signal input “L”: Panel open, “H”: Panel close
27	LCD CE	O	Chip enable signal output to LCD driver IC
28	LCD SO	O	Serial data signal output to LCD driver IC Flash: UART serial out
29	LCD SCK	O	Serial clock signal output to LCD driver IC
30	NC	—	Not used in this set. (Open)
31	STB	O	Standby signal output to power amp IC
32	AUX	—	Not used in this set. (Open)
33	IIC SCK	O	IIC bus serial clock signal output
34	IIC SIO	I/O	IIC bus serial data signal input/output
35	VCC+3.3	—	Power supply pin (+3.3 V) (for A/D converter)
36	AVRH+3.3	—	External reference power supply (+3.3 V) (for A/D converter)
37	AVSS	—	Ground pin (for A/D converter)
38, 39	KEY IN0, 1	I	Key signal input
40	NC	—	Not used in this set. (Open)
41	RC IN0	I	E: Rotary commander key signal input US, Canadian: Not used in this set. (Open)
42	VSS	—	Ground pin
43, 44	NC	—	Not used in this set. (Fixed at “L”.)
45	VSM	I	S meter voltage detect signal input
46	DST SEL	I	Destination select pin
47	KEY ACK	I	Key acknowledge detect signal input
48	NC	—	Not used in this set. (Open)
49, 50	MD0, 1	I	Input for operation mode designation (Fixed at “H”.)
51	MD2	I	Input for operation mode designation (Fixed at “L”.)
52	NC	—	Not used in this set. (Open)
53	BU IN	I	Back up power supply detect signal input
54	OP REQ/INTQ	O	OP REQ/INTQ select signal output
55	CD SELFSW	I	CD mechanism self load position detect switch signal input Not used in this set. (Open)
56	DIAG	I	Condition input from power amp IC
57	TU ATT IN	I	Tuner ATT signal input Not used in this set. (Open)
58	UNI SI	I	Serial data signal input
59	UNI SO	O	Serial data signal output
60	UNI SCK	O	Serial clock signal output
61	BUS ON	O	Bus on signal output

Pin No.	Pin Name	I/O	Pin Description
62	SYS RST	O	System reset signal output
63	TEL ATT	O	TEL ATT signal output Not used in this set. (Open)
64	ACC IN	I	Accessory power supply detect signal input
65	SIRCS	I	Remote control signal (infrared rays) input
66	RAM BU	O	Not used in this set. (Fixed at "L".)
67	TEST IN	I	Test mode detect signal input
68	FLASH W	I	Memory mode changeover signal input Normally "H" input (single chip mode) "L" after reset: Flash write mode
69	NOSE SW	O	Not used in this set. (Fixed at "H".)
70, 71	NC	—	Not used in this set. (Open)
72	DOOR SW	I	Front panel open/close detect signal input "L" input: Panel close, "H" input: Panel open
73	DOOR IND	O	Not used in this set. (Open)
74	RC IN1	I	E: Rotary commander shift key signal input US, Canadian: Not used in this set. (Open)
75	XKEY ON	O	Key power supply control signal output Pin ㊼ (KEY ACK) active: "L" output
76	NC	—	Not used in this set. (Open)
77	RESET	I	Reset signal input
78	NC	—	Not used in this set. (Open)
79	X1A	—	Oscillator connect pin (32 kHz)
80	X0A	—	Oscillator connect pin (32 kHz)
81	VSS	—	Ground pin
82	X0	—	Oscillator connect pin (3.68 MHz)
83	X1	—	Oscillator connect pin (3.68 MHz)
84	VCC+3.3	—	Power supply pin (+3.3 V)
85 to 88	NC	—	Not used in this set. (Open)
89	ZERO DET R	I	Mechanism deck mute zero closs detect signal input R
90	ZERO DET L	I	Mechanism deck mute zero closs detect signal input L
91	CD STB	O	CD servo data strob signal output Timing of data latch: "L" output Not used in this set. (Open)
92	CD IN SW	I	CD mechanism IN-SW detect signal input Not used in this set. (Open)
93	CD LOAD	O	CD mechanism loading motor control signal output Not used in this set. (Open)
94	CD ON/EJECT	O	CD mechanism eject motor control signal output
95	CDM ON/D SW	I	CD mechanism DSW detect signal input
96	CD LIMIT	I	CD mechanism IN-LIMIT SW signal input Not used in this set. (Open)
97	RFOK	I	CD servo RFOK signal input
98	CD XRST	O	CD servo reset signal output Not used in this set. (Open)
99	CD A0	O	CD servo command/parameter identification signal output Command transmission: "L" output, parameter transmission: "H" output Not used in this set. (Open)
100	NC	—	Not used in this set. (Open)

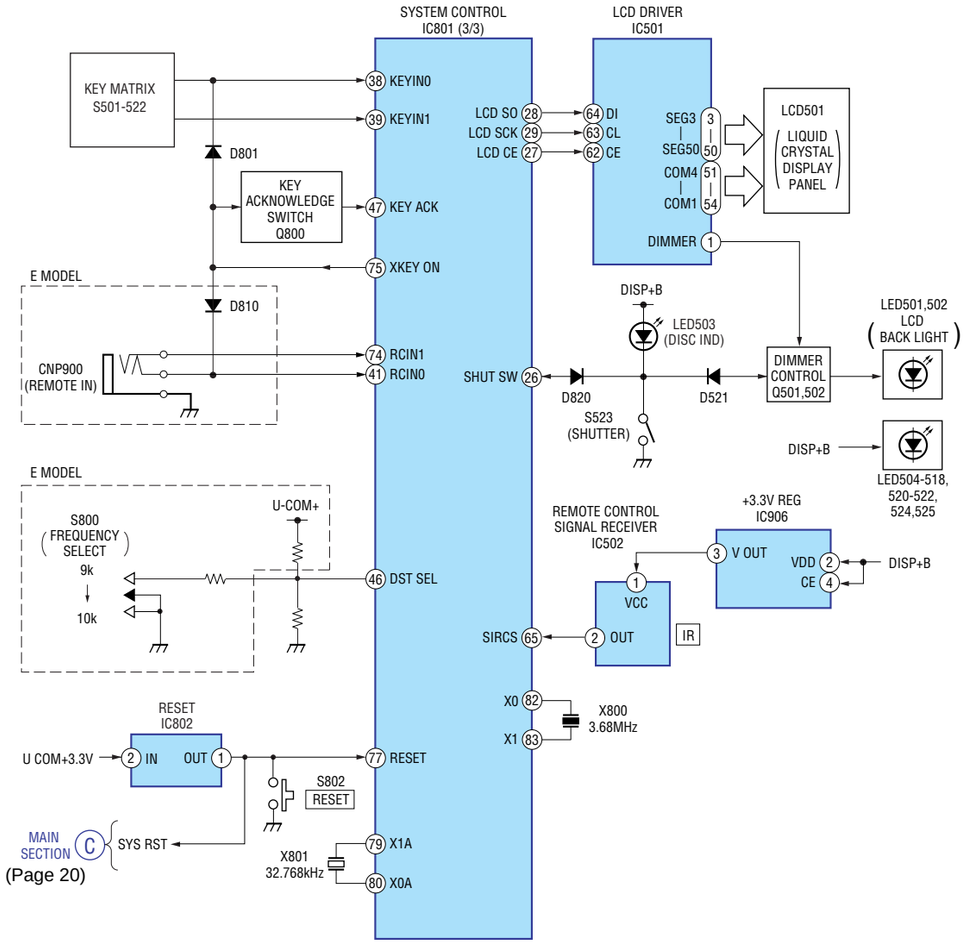
3-2. BLOCK DIAGRAM — CD SECTION —



3-3. BLOCK DIAGRAM — MAIN SECTION —

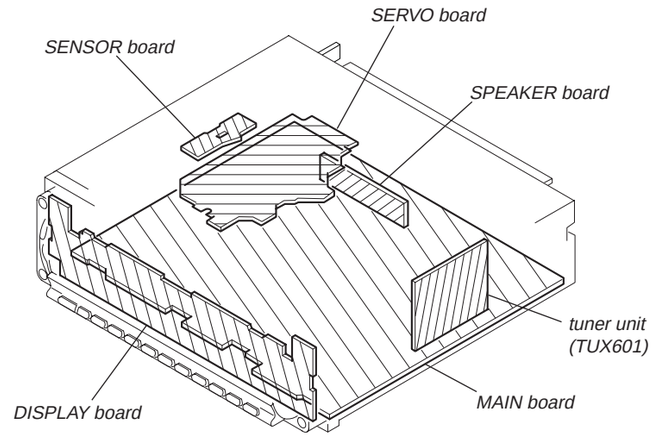


3-4. BLOCK DIAGRAM — DISPLAY SECTION —



(Page 20)

3-5. CIRCUIT BOARDS LOCATION



3-6. NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

For schematic diagrams.

Note:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

- ▬ : B+ Line.
- ▬ ▬ : B– Line.
- ▭ : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- CD mechanism section (1/2), (2/2)
  no mark : CD PLAY
- Main (1/2), (2/2) and Display sections
  no mark : FM
  ( ) : AM
  < > : CD PLAY
  * : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : CD PLAY
  ⇨ : FM
  ➡ : AM
- Abbreviation
  CND : Canadian model.

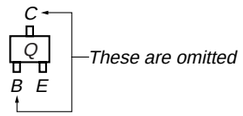
For printed wiring boards.

Note:

- o——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- ○ : Through hole.
- ▬ : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)

Caution:	
Pattern face side: (Side B)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Side A)	Parts on the parts face side seen from the parts face are indicated.



These are omitted

These are omitted

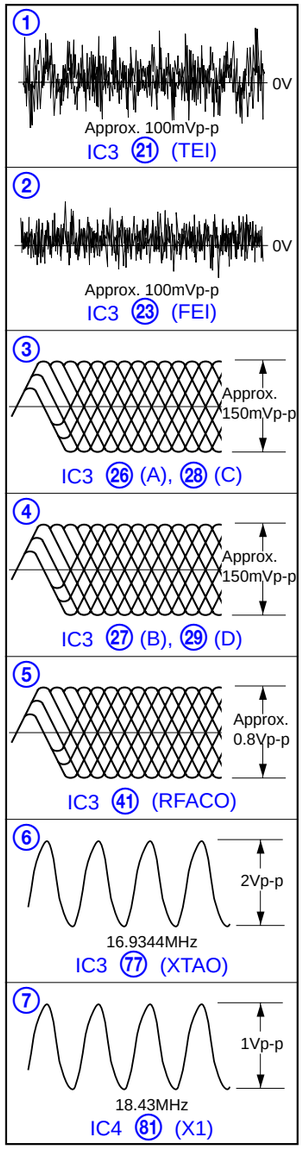
These are omitted

- Abbreviation
  CND : Canadian model.

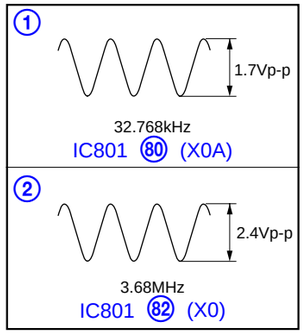
3-7. WAVEFORMS

— Servo Board —

(MODE: CD PLAY)

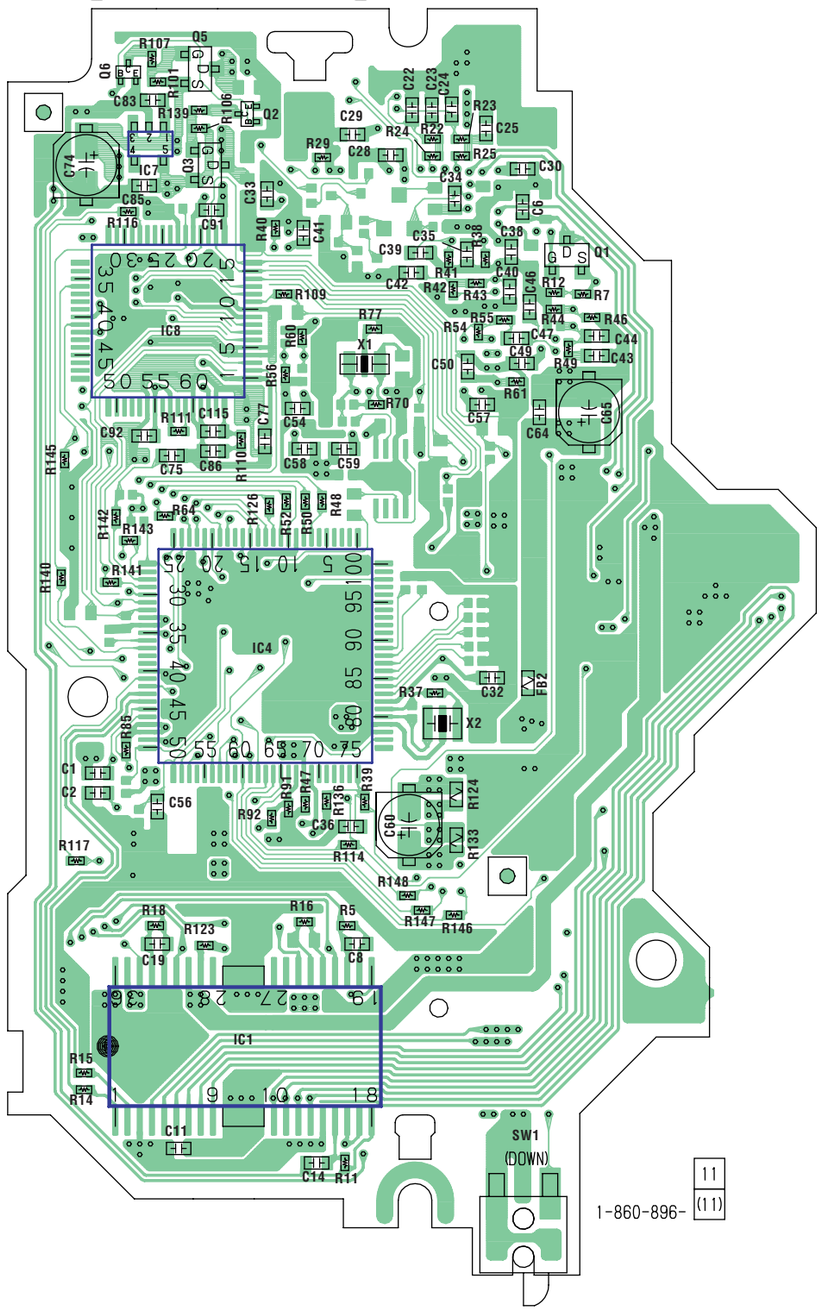


— Main Board —

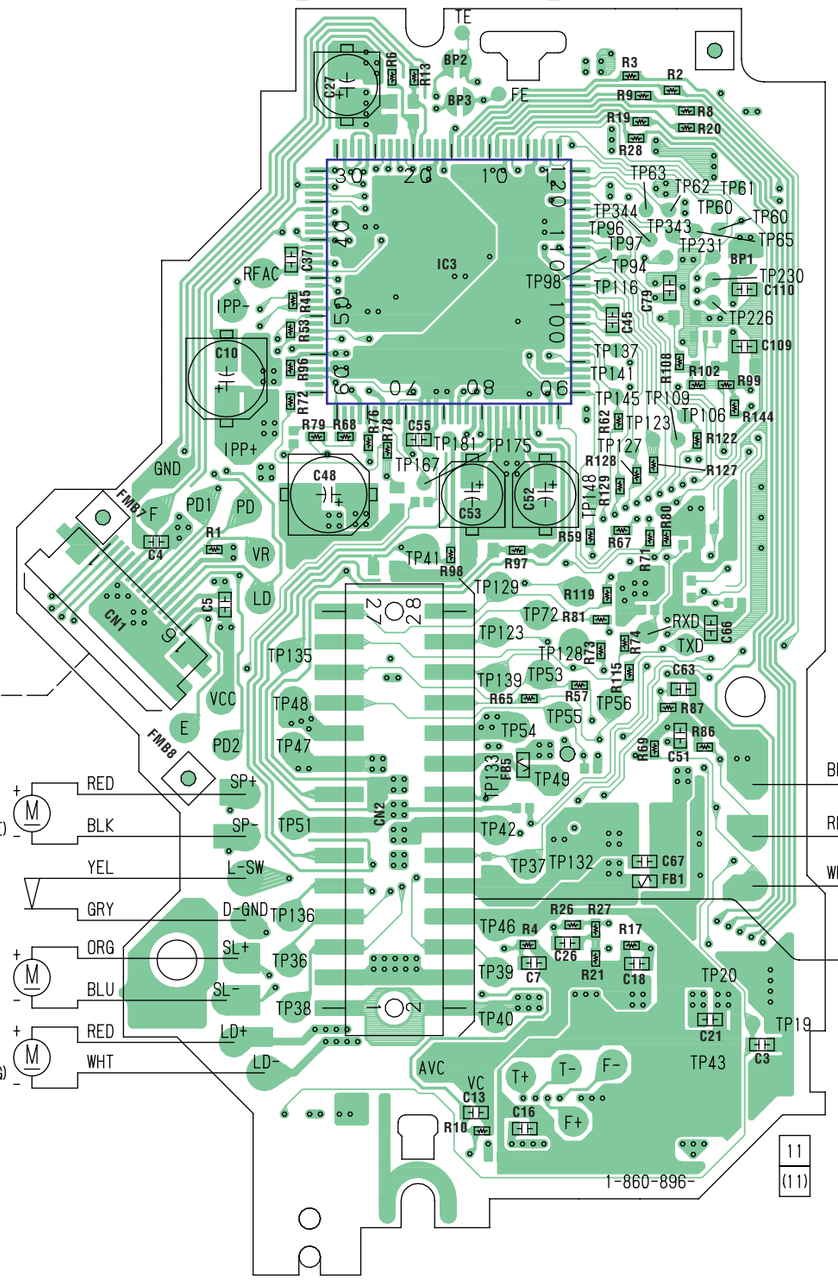


3-8. PRINTED WIRING BOARDS — CD MECHANISM SECTION — • Refer to page 21 for Circuit Boards Location. : Uses unleaded solder.

【SERVO BOARD】(SIDE A)

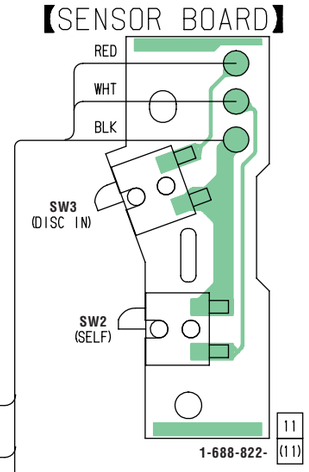


【SERVO BOARD】(SIDE B)



OPTICAL PICK-UP BLOCK KSS1000E

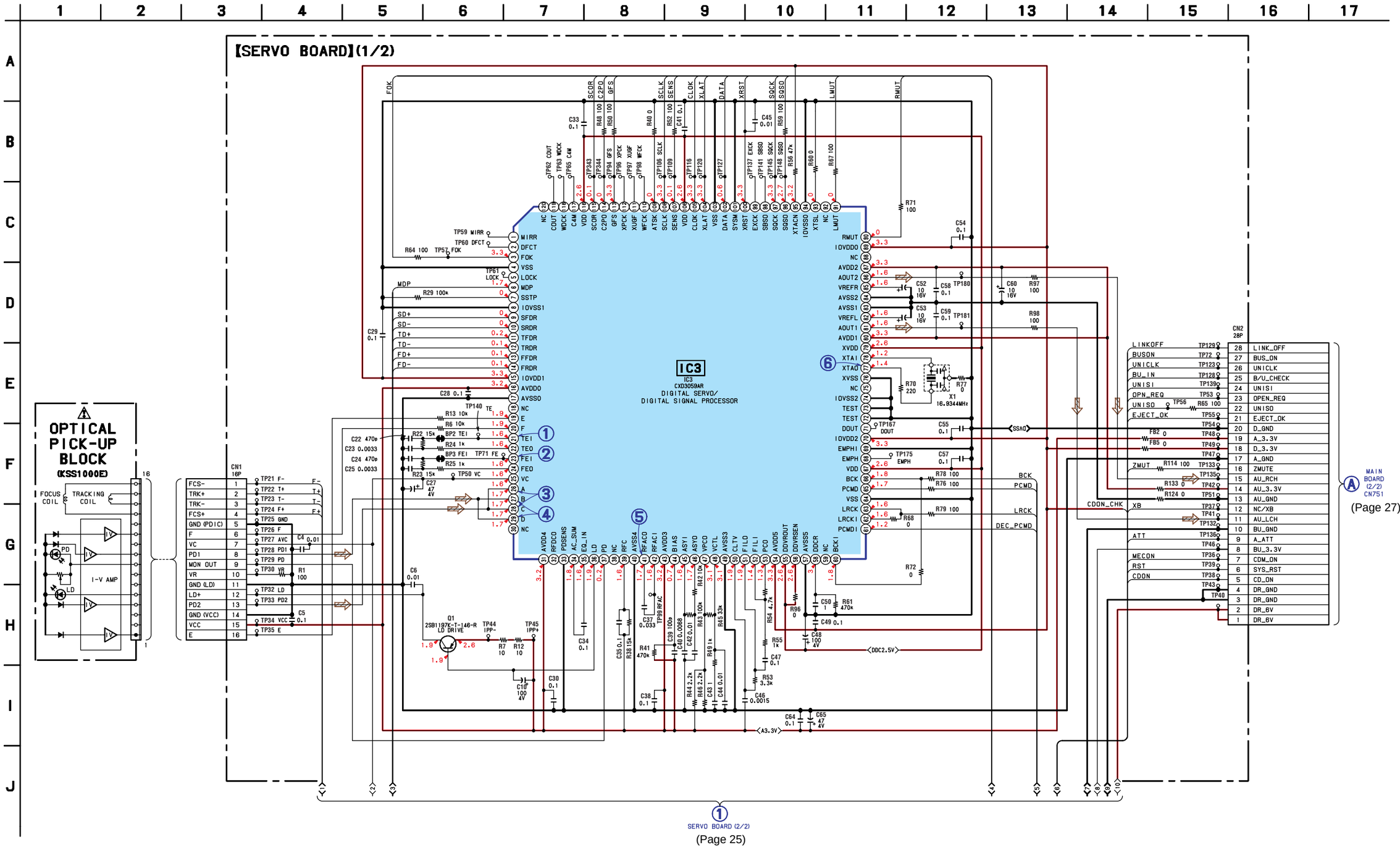
【SENSOR BOARD】



• **Semiconductor Location**

Ref. No.	Location
IC1	G-2
IC3	C-10
IC4	E-2
IC7	B-2
IC8	C-2
Q1	C-4
Q2	B-2
Q3	B-2
Q5	A-2
Q6	A-2

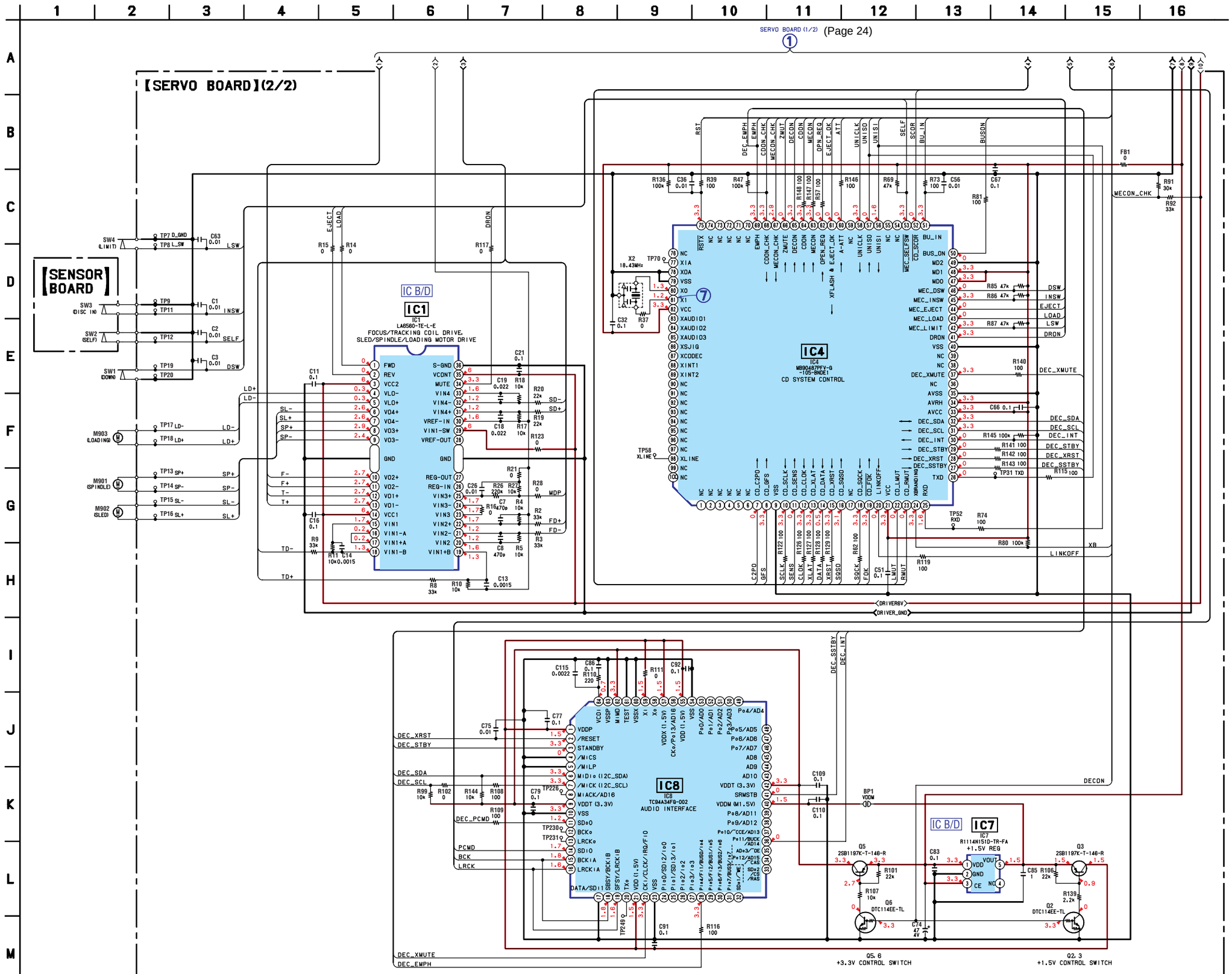
3-9. SCHEMATIC DIAGRAM — CD MECHANISM SECTION (1/2) — • Refer to page 22 for Waveforms.



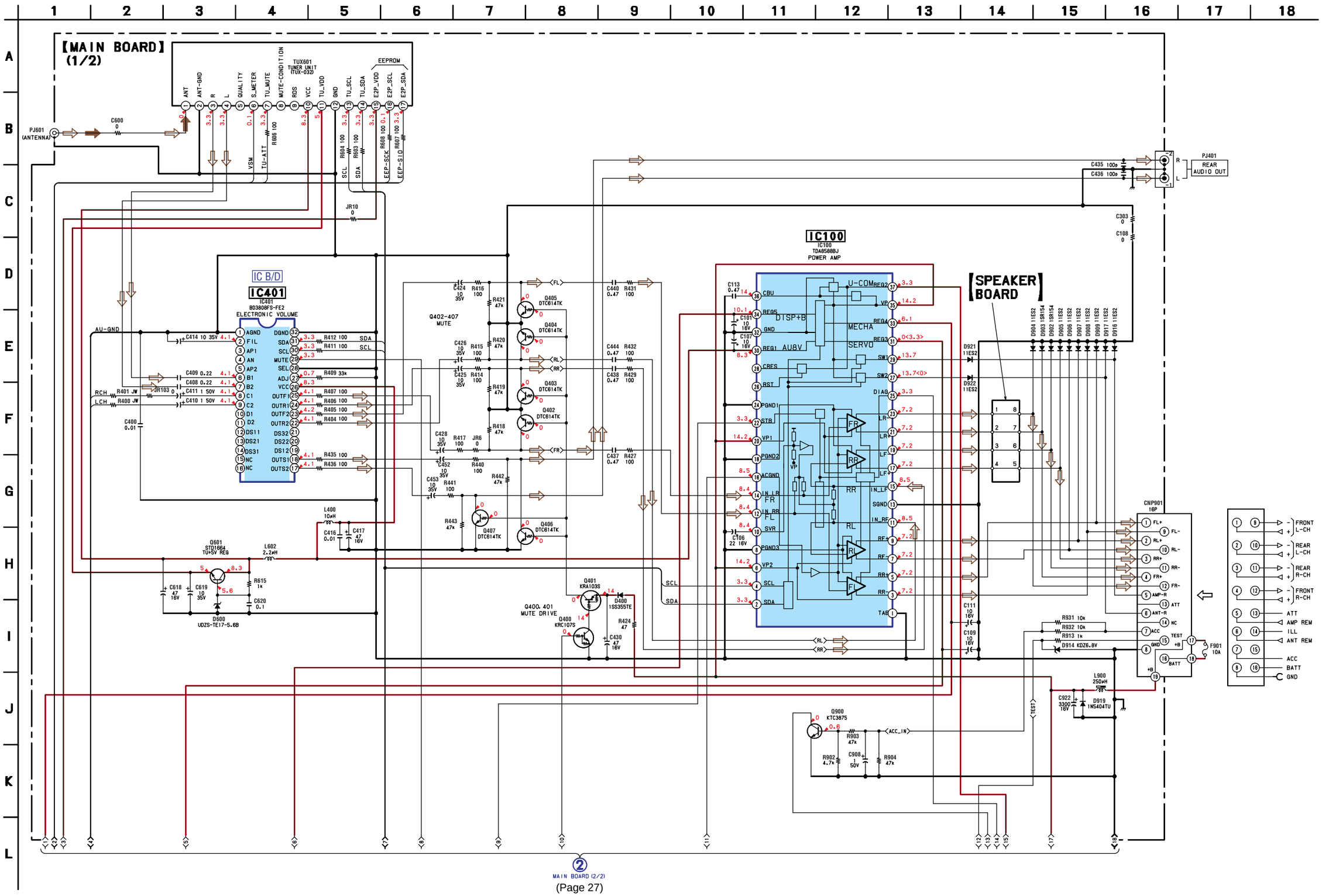
• Refer to page 22 for Waveforms.

3-10. SCHEMATIC DIAGRAM — CD MECHANISM SECTION (2/2) —

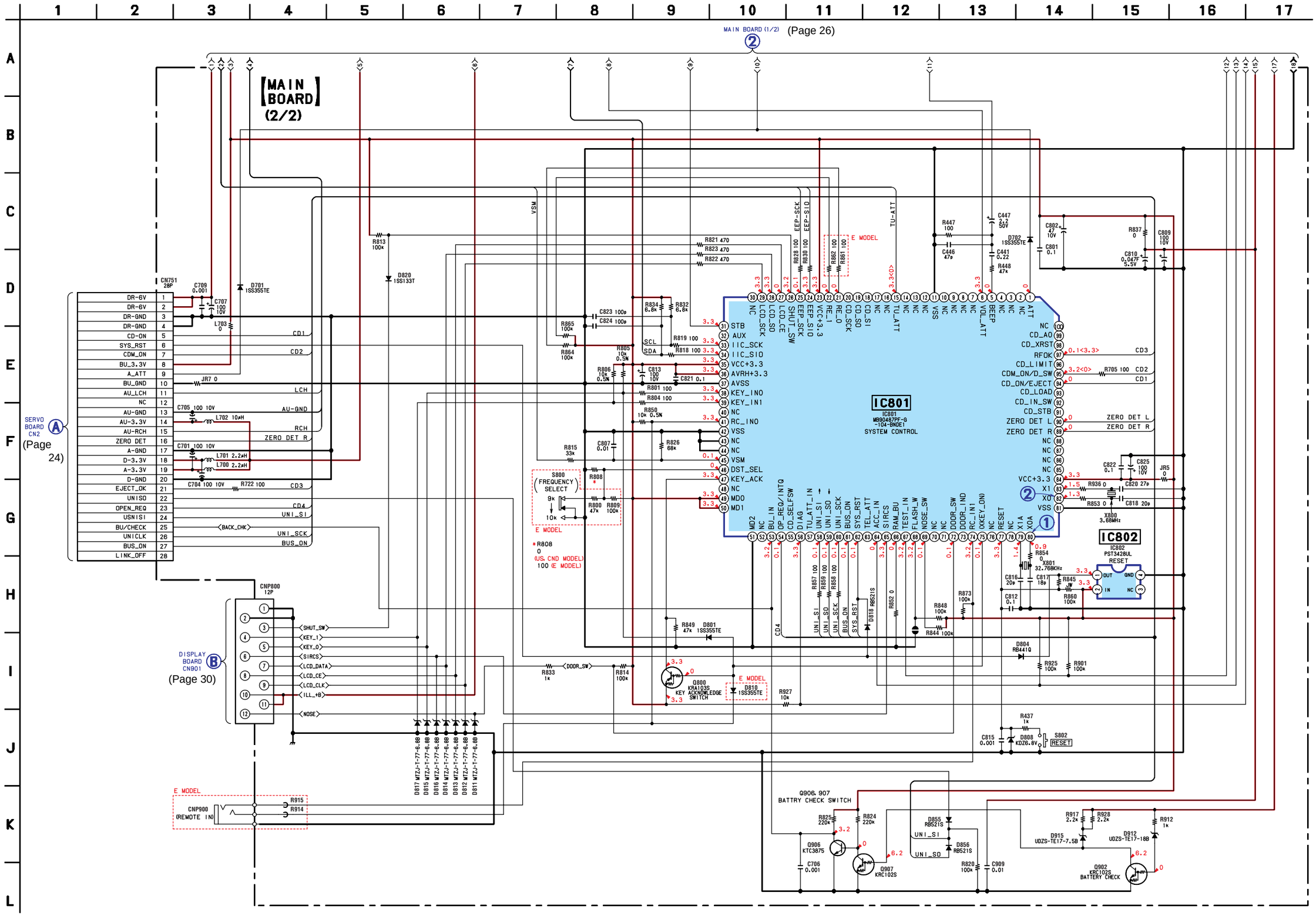
• Refer to page 31 for IC Block Diagram.



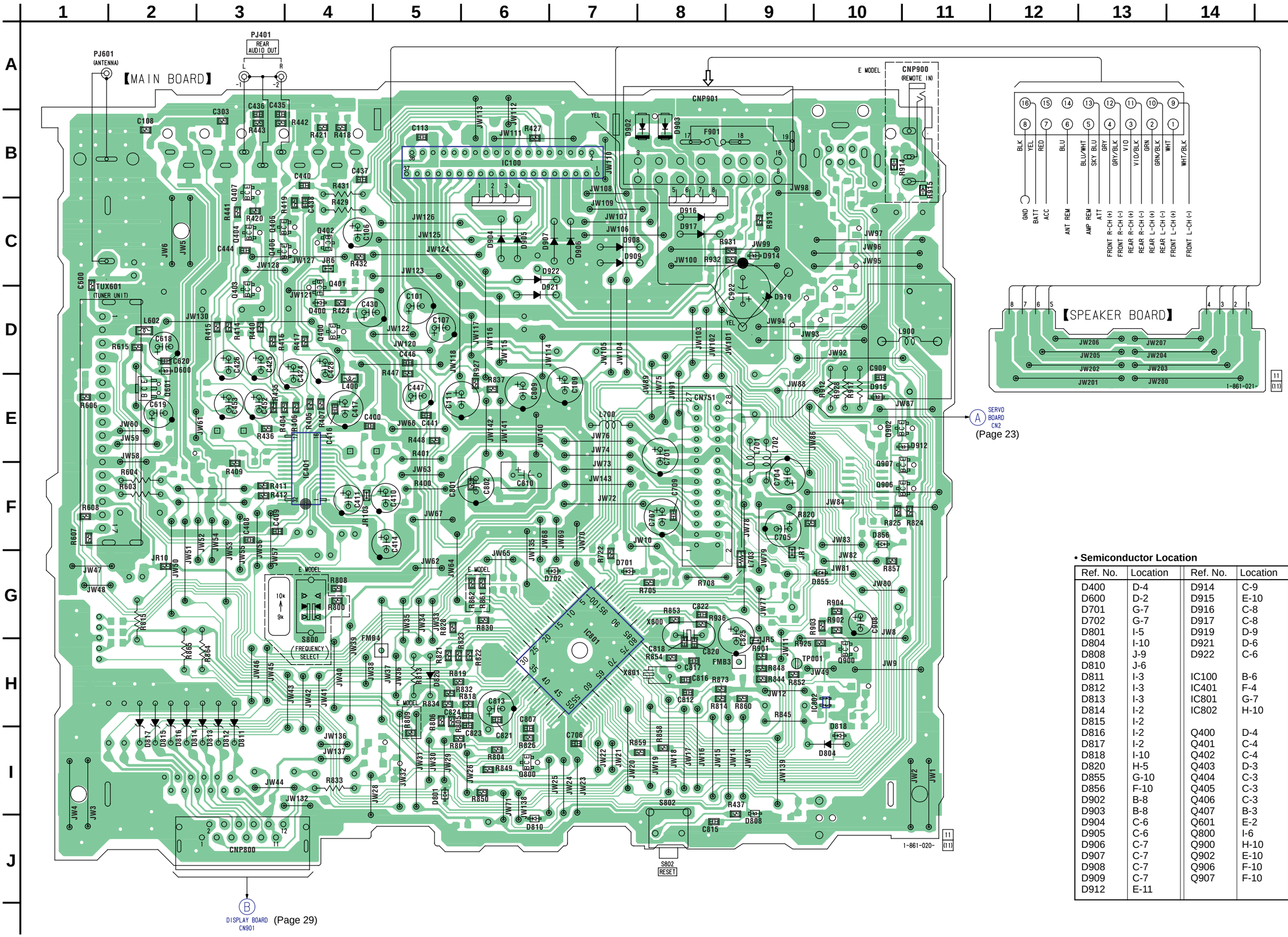
3-11. SCHEMATIC DIAGRAM — MAIN SECTION (1/2) — • Refer to page 32 for IC Block Diagram.



3-12. SCHEMATIC DIAGRAM — MAIN SECTION (2/2) — • Refer to page 22 for Waveforms.



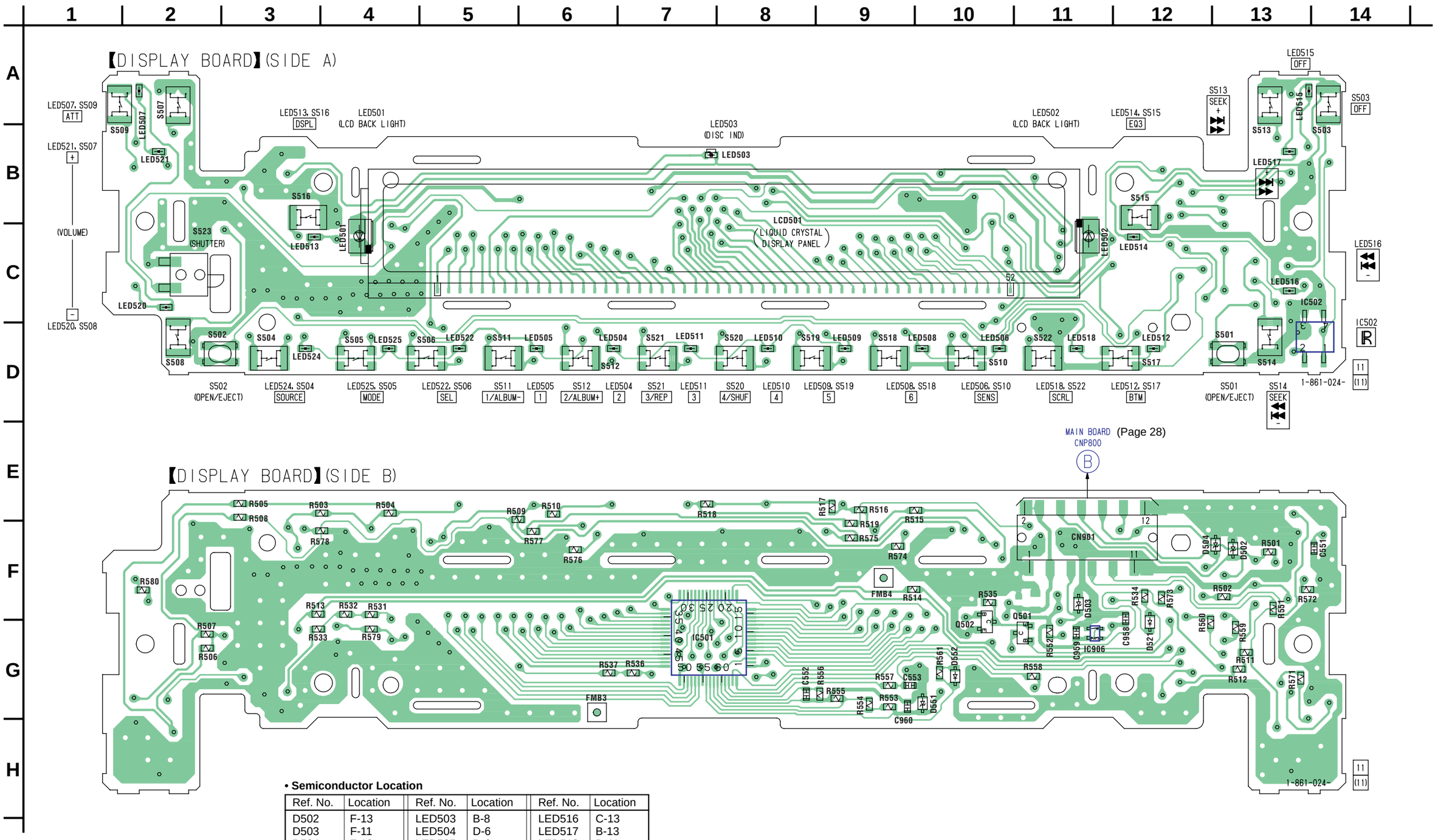
3-13. PRINTED WIRING BOARDS — MAIN SECTION — • Refer to page 21 for Circuit Boards Location. : Uses unleaded solder.



• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
D400	D-4	D914	C-9
D600	D-2	D915	E-10
D701	G-7	D916	C-8
D702	G-7	D917	C-8
D801	I-5	D919	D-9
D804	I-10	D921	D-6
D808	J-9	D922	C-6
D810	J-6		
D811	I-3	IC100	B-6
D812	I-3	IC401	F-4
D813	I-3	IC801	G-7
D814	I-2	IC802	H-10
D815	I-2		
D816	I-2	Q400	D-4
D817	I-2	Q401	C-4
D818	I-10	Q402	C-4
D820	H-5	Q403	D-3
D855	G-10	Q404	C-3
D856	F-10	Q405	C-3
D902	B-8	Q406	C-3
D903	B-8	Q407	B-3
D904	C-6	Q601	E-2
D905	C-6	Q800	I-6
D906	C-7	Q900	H-10
D907	C-7	Q902	E-10
D908	C-7	Q906	F-10
D909	C-7	Q907	F-10
D912	E-11		

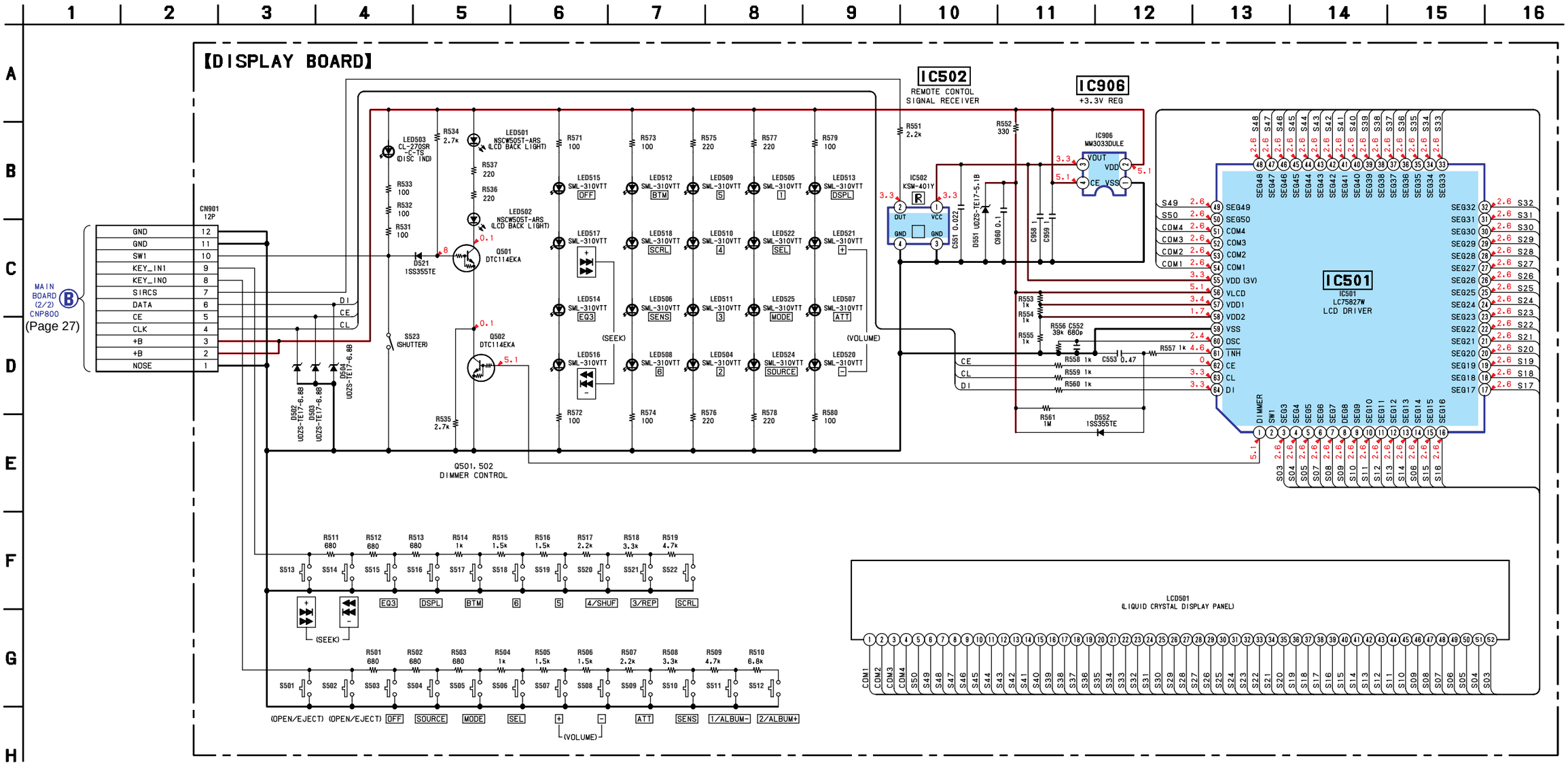
3-14. PRINTED WIRING BOARD — DISPLAY SECTION — • Refer to page 21 for Circuit Boards Location. : Uses unleaded solder.



• **Semiconductor Location**

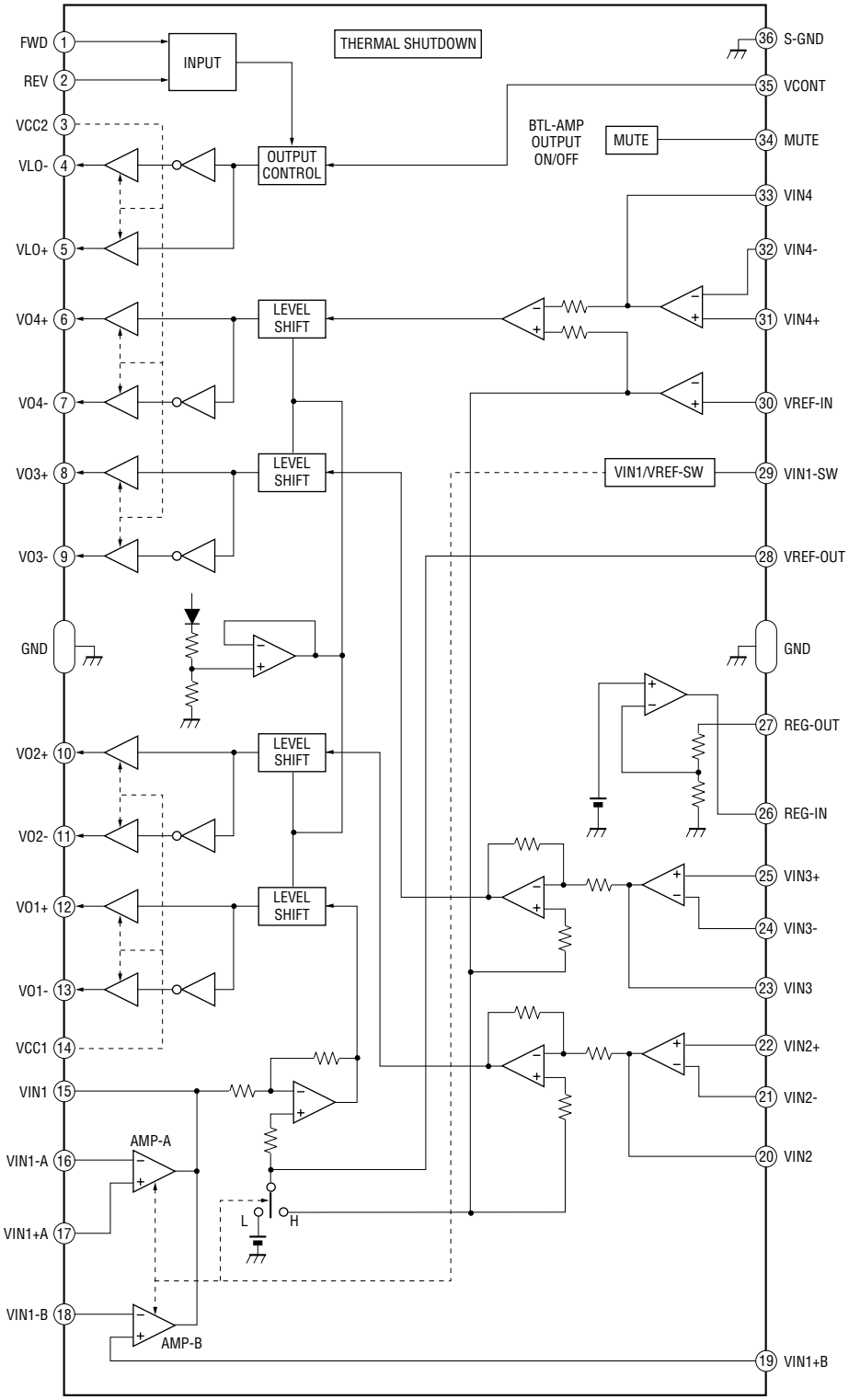
Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D502	F-13	LED503	B-8	LED516	C-13
D503	F-11	LED504	D-6	LED517	B-13
D504	F-13	LED505	D-6	LED518	D-11
D521	G-12	LED506	D-10	LED520	C-2
D551	G-10	LED507	A-2	LED521	B-2
D552	G-10	LED508	D-10	LED522	D-5
		LED509	D-9	LED524	D-2
IC501	G-7	LED510	D-8	LED525	D-4
IC502	D-14	LED511	D-7		
IC906	G-11	LED512	D-12	Q501	G-11
		LED513	C-3	Q502	G-10
LED501	C-4	LED514	C-12		
LED502	C-11	LED515	A-13		

3-15. SCHEMATIC DIAGRAM — DISPLAY SECTION —

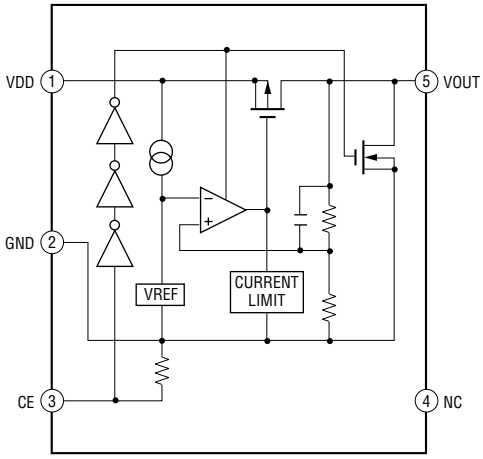


3-16. IC BLOCK DIAGRAMS

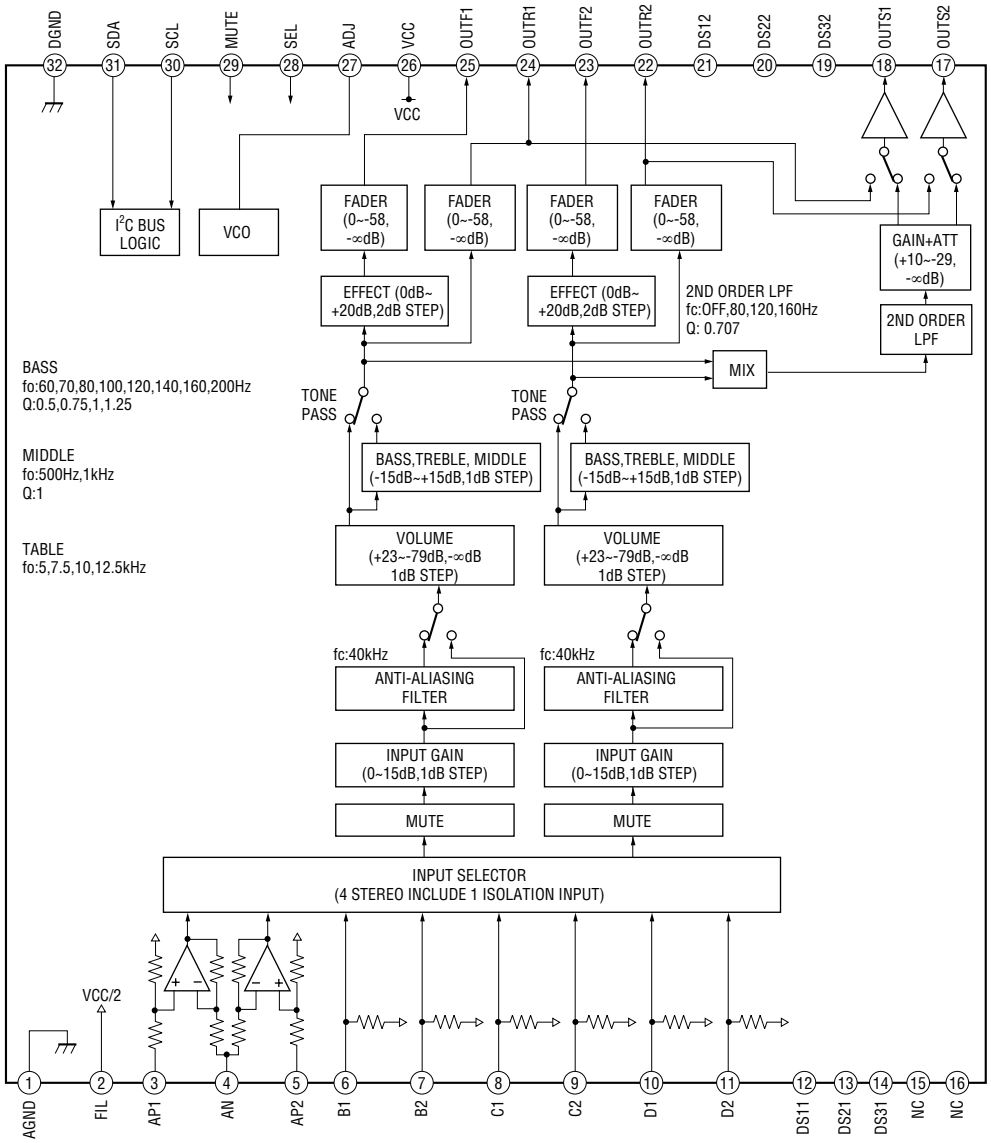
IC1 LA6560-TE-L-E (SERVO Board)



IC7 R1114N151D-TR-FA (SERVO Board)



IC401 BD3808FS (MAIN Board)



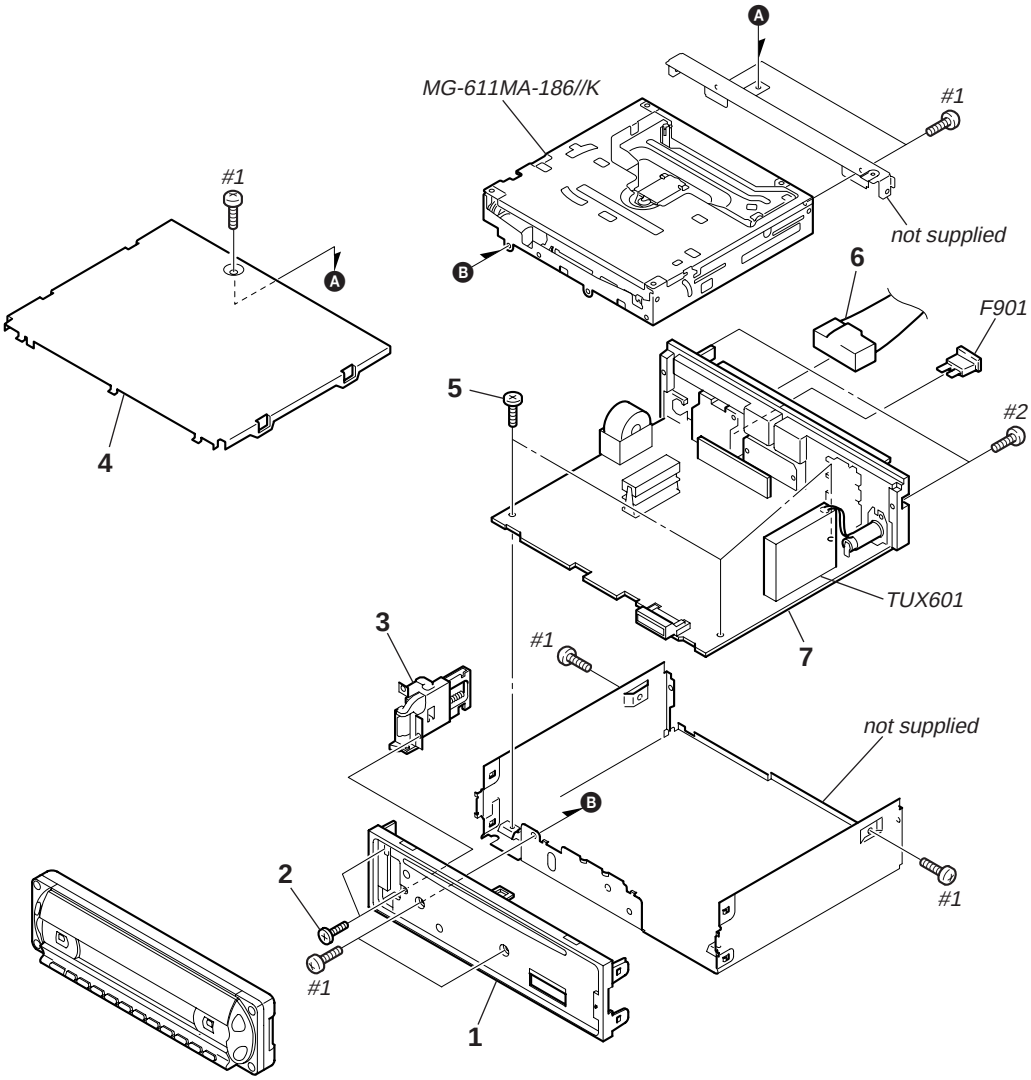
SECTION 4
EXPLODED VIEWS

NOTE:
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example :
  KNOB, BALANCE (WHITE) ... (RED)
  ↑ Parts Color ↑ Cabinet's Color
- Accessories are given in the last of this parts list.
- Abbreviation
  CND : Canadian model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

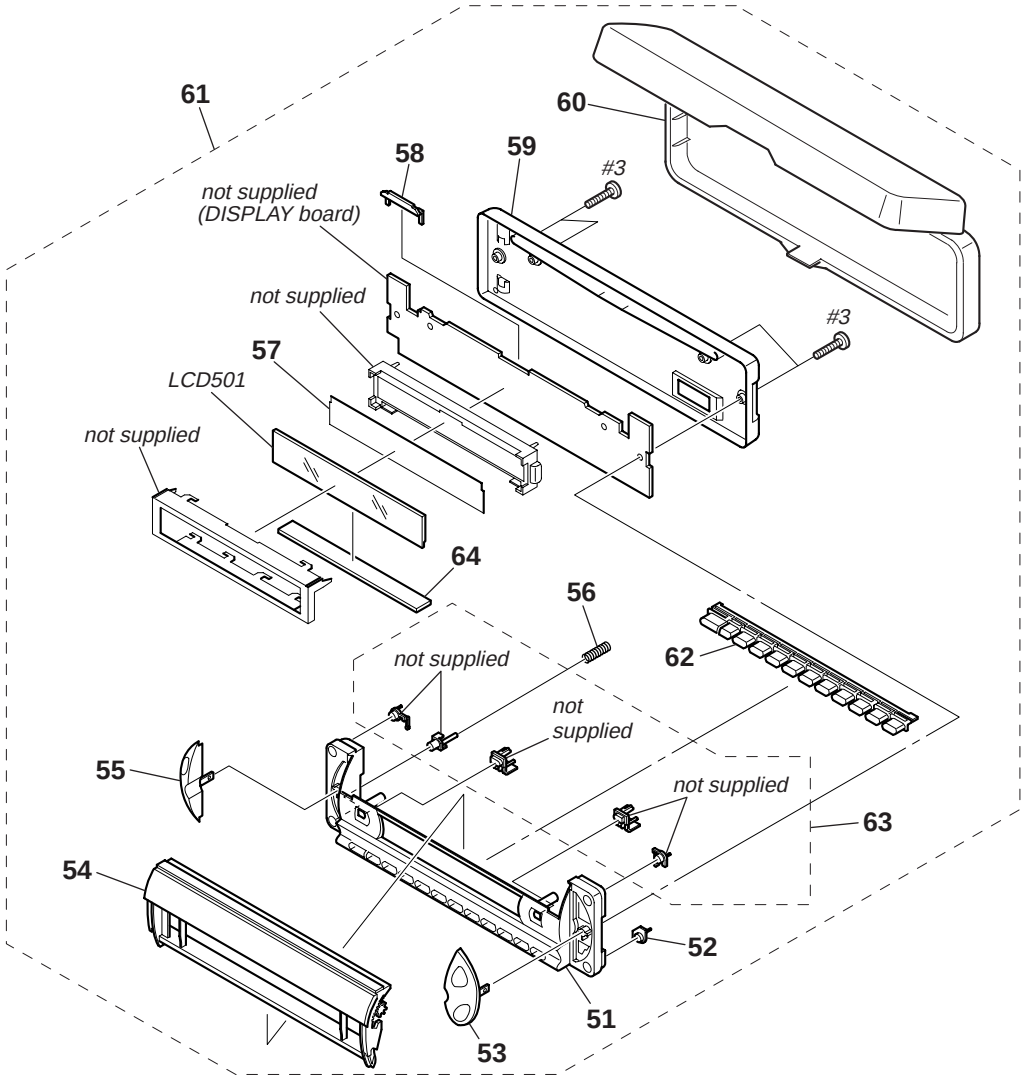
4-1. MAIN SECTION



Ref. No.	Part No.	Description	Remark
1	X-3384-407-1	PANEL (1) ASSY, SUB	
2	3-231-472-01	SCREW (+B 2X4)	
3	X-3382-588-1	LOCK ASSY (S)	
* 4	3-246-006-31	COVER	
5	3-922-535-11	SCREW (+BTT)	
6	1-776-206-21	CORD (WITH CONNECTOR) (POWER)	

Ref. No.	Part No.	Description	Remark
7	A-3283-493-A	MAIN BOARD, COMPLETE (US,CND)	
7	A-3283-494-A	MAIN BOARD, COMPLETE (E)	
F901	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) 10A	
TUX601	A-3220-961-A	TUNER UNIT (TUX-032)	
#1	7-685-792-09	SCREW +PTT 2.6X6 (S)	
#2	7-685-793-09	SCREW +PTT 2.6X8 (S)	

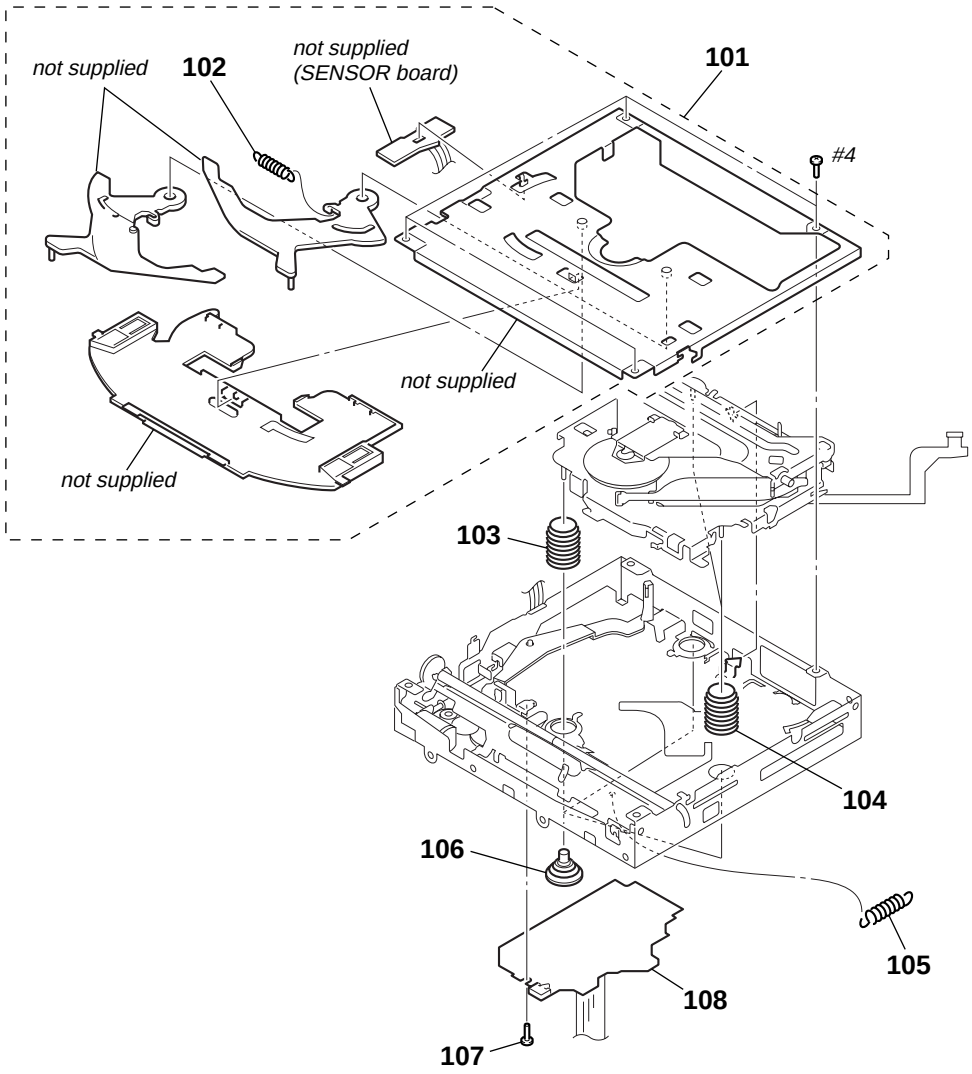
4-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
51	X-3384-620-1	PANEL (BASE) ASSY, FRONT (R3300:US,CND)	
51	X-3384-629-1	PANEL (BASE) ASSY, FRONT (R3300:E)	
51	X-3384-690-1	PANEL (BASE) ASSY, FRONT (R3300S)	
52	3-258-879-01	FILTER (IR)	
53	3-258-874-01	BUTTON (SEEK) (R3300:E)	
53	3-258-874-11	BUTTON (SEEK) (R3300:US,CND/R3300S)	
54	X-3384-070-1	RETRACTABLE ASSY (R3300:E)	
54	X-3384-621-1	RETRACTABLE ASSY (R3300:US,CND/R3300S)	
55	3-258-873-01	BUTTON (+,–) (R3300:E)	
55	3-258-873-11	BUTTON (+,–) (R3300:US,CND/R3300S)	
56	3-246-211-01	SPRING (RELEASE)	
57	3-258-884-01	SHEET (ILLUMINATOR)	
58	3-258-880-01	PLATE (CD), LIGHT GUIDE	
59	3-258-869-01	PANEL, FRONT BACK	

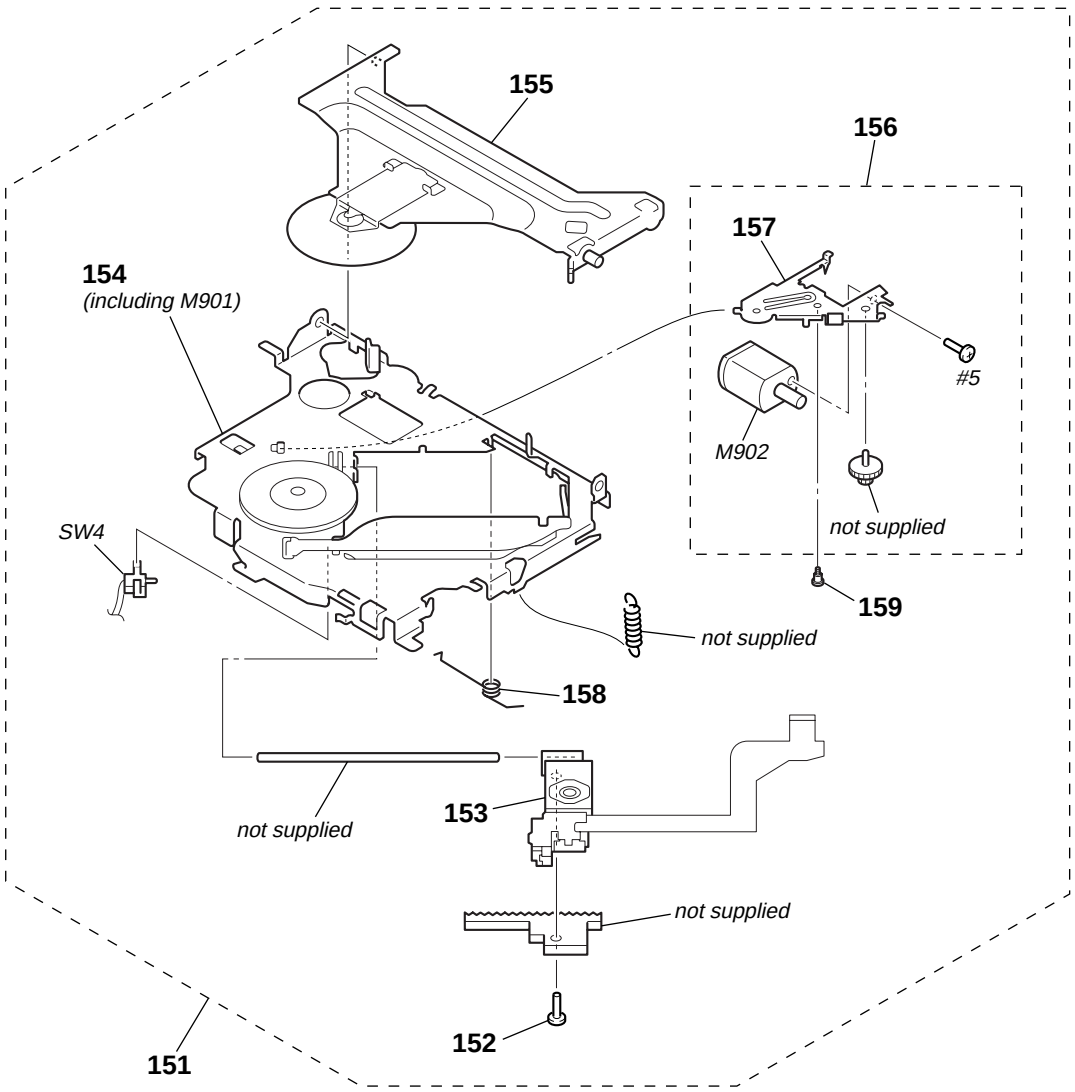
Ref. No.	Part No.	Description	Remark
60	X-3378-390-3	CASE ASSY (for FRONT PANEL)	
61	A-3372-732-A	PANEL COMPLETE ASSY, FRONT (R3300:US,CND)	
61	A-3372-737-A	PANEL COMPLETE ASSY, FRONT (R3300S)	
61	A-3372-741-A	PANEL COMPLETE ASSY, FRONT (R3300:E)	
62	3-258-875-01	BUTTON (PRESET) (R3300:US,CND)	
62	3-258-875-11	BUTTON (PRESET) (R3300S)	
62	3-258-875-21	BUTTON (PRESET) (R3300:E)	
63	X-3384-457-1	BUTTON ASSY (S) (E)	
63	X-3384-618-1	BUTTON ASSY (S) (US,CND)	
64	1-780-120-11	CONDUCTIVE BOARD, CONNECTION	
LCD501	1-805-451-11	DISPLAY PANEL, LIQUID CRYSTAL	
#3	7-685-105-19	SCREW +P 2X8 TYPE2 NON-SLIT	

4-3. CD MECHANISM SECTION (1)
(MG-611MA-186//K)



Ref. No.	Part No.	Description	Remark
101	A-3372-455-A	CHASSIS (T) SUB ASSY	
102	3-253-729-01	SPRING (LTR), TENSION COIL	
103	3-253-746-13	SPRING (DAMPER), COMPRESSION	
104	3-253-746-03	SPRING (DAMPER), COMPRESSION	
105	3-253-695-01	SPRING (KF), TENSION COIL	
106	3-253-748-01	DAMPER (S)	
107	3-352-758-31	SCREW (M1.7), TOOTHED LOCK	
108	A-3283-359-A	SERVO BOARD, COMPLETE	
#4	7-627-552-87	SCREW, PRECISION +P 1.7X2.2	

4-4. CD MECHANISM SECTION (2)
(MG-611MA-186//K)

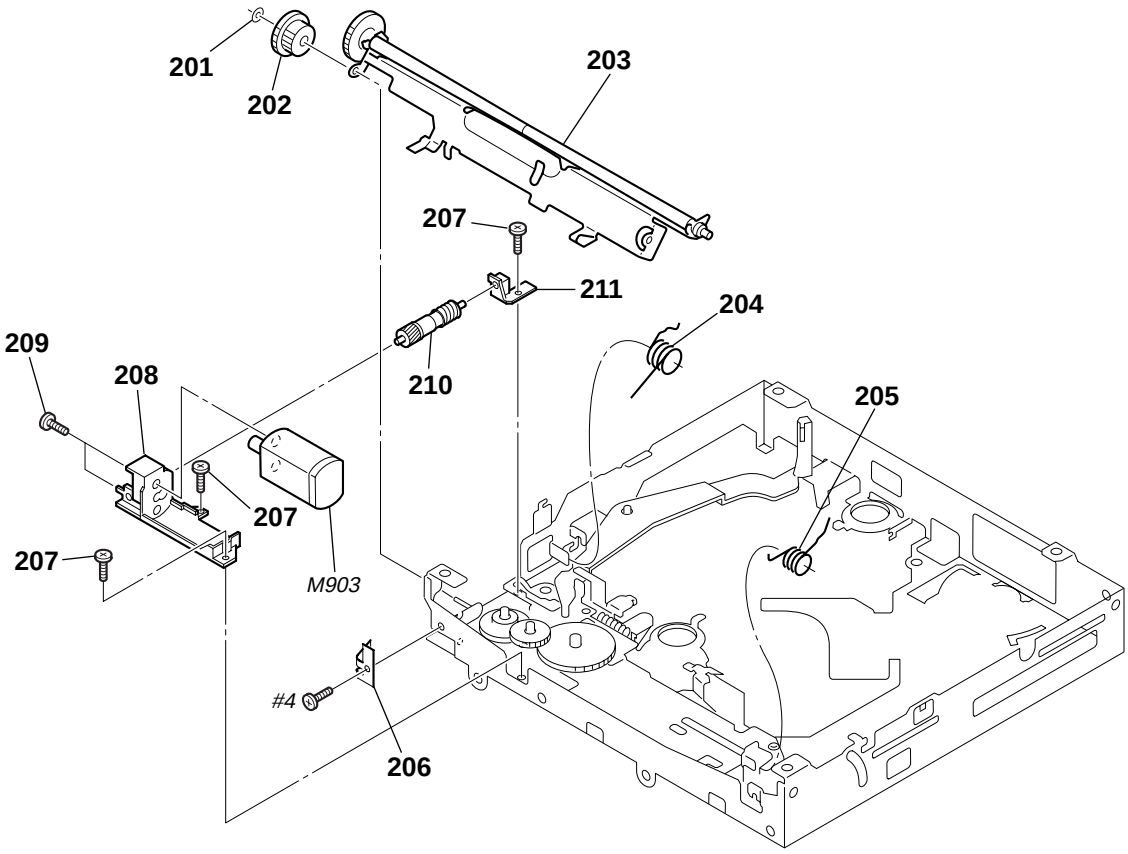


The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
151	A-3337-637-A	CHASSIS (OP) COMPLETE ASSY	
152	4-912-432-01	SCREW (B1.4X5), TAPPING	
⚠153	8-820-207-02	OPTICAL PICK-UP (KSS1000E/K1RP)	
154	A-3337-640-A	CHASSIS (OP) SUB ASSY (including M901)	
155	A-3337-641-A	ARM SUB ASSY, CHUCKING	
156	A-3337-639-A	LEVER (SL) SUB ASSY	

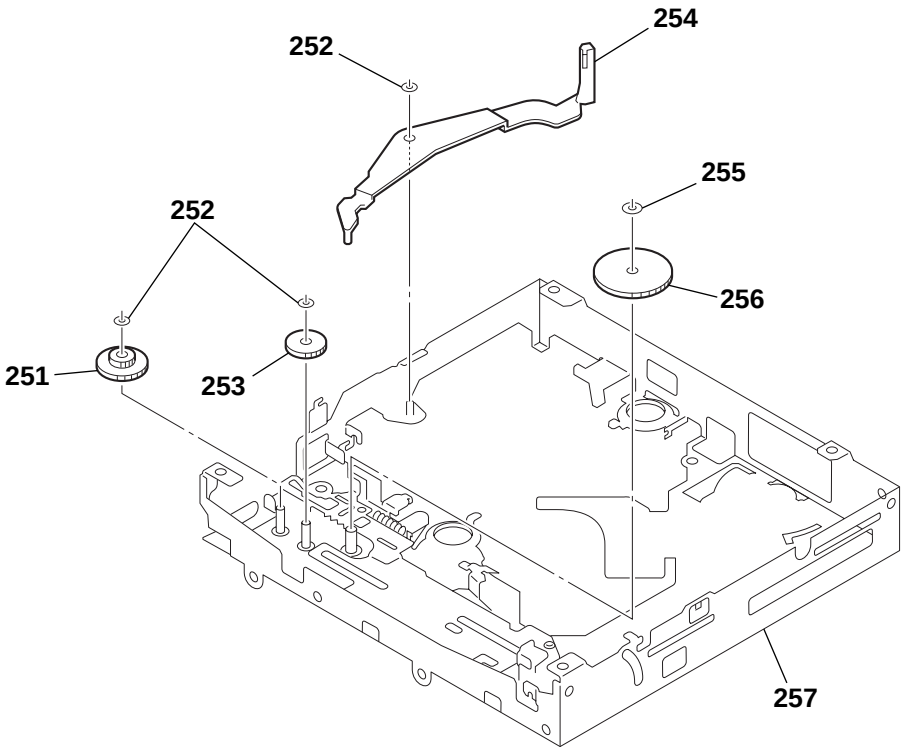
Ref. No.	Part No.	Description	Remark
157	X-3383-454-2	LEVER (SL) ASSY	
158	3-261-959-01	SPRING (SL), TORSION	
159	3-264-165-02	SCREW	
M902	A-3337-638-A	MOTOR ASSY, SL (SLED)	
SW4	1-571-099-11	SWITCH (1 KEY) (LIMIT)	
#5	7-627-850-77	SCREW, PRECISION +P 1.4X1.8	

4-5. CD MECHANISM SECTION (3)
(MG-611MA-186//K)



Ref. No.	Part No.	Description	Remark
201	3-262-755-01	WASHER (1.1-2.5)	
202	3-259-024-01	WHEEL (RA), WORM	
203	A-3337-633-A	ARM ASSY, ROLLER	
204	3-259-455-02	SPRING (RAL)	
205	3-253-713-01	SPRING (RAR)	
206	3-259-469-01	SPRING (LE), LEAF	
207	2-134-636-31	SCREW (M1.7X2.5)	
208	3-259-467-01	BRACKET (LEM)	
209	3-345-648-91	SCREW (M1.4), TOOTHED LOCK	
210	A-3372-456-A	WORM (LEB) ASSY	
211	3-259-468-01	BEARING (LEB)	
M903	A-3372-454-A	MOTOR ASSY, LE (LOADING)	
#4	7-627-552-87	SCREW, PRECISION +P 1.7X2.2	

4-6. CD MECHANISM SECTION (4)
(MG-611MA-186//K)



Ref. No.	Part No.	Description	Remark
251	3-259-429-01	WHEEL (LE), WORM	
252	3-344-223-01	WASHER	
253	3-259-470-01	GEAR (LE1)	
254	3-253-755-01	LEVER (D)	
255	3-899-829-01	WASHER (SLIT)	
256	3-259-032-01	GEAR (LE2)	
257	A-3372-453-A	CHASSIS (M) BLOCK ASSY	

SECTION 5
ELECTRICAL PARTS LIST

DISPLAY

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable

When indicating parts by reference number, please include the board.

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : µ, for example:
  uA.. : µA.. uPA.. : µPA..
  uPB.. : µPB.. uPC.. : µPC.. uPD.. : µPD..
- CAPACITORS
  uF : µF
- COILS
  uH : µH
- Abbreviation
  CND : Canadian model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remark
		DISPLAY BOARD, COMPLETE			
		**********			
	1-780-120-11	CONDUCTIVE BOARD, CONNECTION			
		< CAPACITOR >			
C551	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C552	1-162-963-11	CERAMIC CHIP	680PF	10%	50V
C553	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C958	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C959	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C960	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
		< CONNECTOR >			
CN901	1-794-312-21	PIN, CONNECTOR 12P			
		< DIODE >			
D502	8-719-978-33	DIODE DTZ-TT11-6.8B			
D503	8-719-978-33	DIODE DTZ-TT11-6.8B			
D504	8-719-978-33	DIODE DTZ-TT11-6.8B			
D521	8-719-988-61	DIODE 1SS355TE-17			
D551	8-719-069-54	DIODE UDZS-TE17-5.1B			
D552	8-719-988-61	DIODE 1SS355TE-17			
		< IC >			
IC501	6-705-180-01	IC LC75827W			
IC502	6-600-321-01	IC KSM-401Y (IR)			
IC906	6-705-374-01	IC MM3033DULE			
		< LIQUID CRYSTAL DISPLAY >			
LCD501	1-805-451-11	DISPLAY PANEL, LIQUID CRYSTAL			
		< DIODE >			
LED501	6-500-459-01	LED NSCW505T-ARS (LCD BACK LIGHT)			
LED502	6-500-459-01	LED NSCW505T-ARS (LCD BACK LIGHT)			
LED503	8-719-082-38	LED CL-270SR-C-TS (DISC IND)			
LED504	8-719-053-09	LED SML-310VT-T86 (2)			
LED505	8-719-053-09	LED SML-310VT-T86 (1)			
LED506	8-719-053-09	LED SML-310VT-T86 (SENS)			
LED507	8-719-053-09	LED SML-310VT-T86 (ATT)			
LED508	8-719-053-09	LED SML-310VT-T86 (6)			
LED509	8-719-053-09	LED SML-310VT-T86 (5)			
LED510	8-719-053-09	LED SML-310VT-T86 (4)			
LED511	8-719-053-09	LED SML-310VT-T86 (3)			
LED512	8-719-053-09	LED SML-310VT-T86 (BTM)			
LED513	8-719-053-09	LED SML-310VT-T86 (DSPL)			
LED514	8-719-053-09	LED SML-310VT-T86 (EQ3)			
LED515	8-719-053-09	LED SML-310VT-T86 (OFF)			
LED516	8-719-053-09	LED SML-310VT-T86 (◀◀ I◀◀ –)			
LED517	8-719-053-09	LED SML-310VT-T86 (+ ▶▶I ▶▶)			
LED518	8-719-053-09	LED SML-310VT-T86 (SCRL)			
LED520	8-719-053-09	LED SML-310VT-T86 (–)			
LED521	8-719-053-09	LED SML-310VT-T86 (+)			
LED522	8-719-053-09	LED SML-310VT-T86 (SEL)			
LED524	8-719-053-09	LED SML-310VT-T86 (SOURCE)			
LED525	8-719-053-09	LED SML-310VT-T86 (MODE)			
		< TRANSISTOR >			
Q501	8-729-027-43	TRANSISTOR DTC114EKA-T146			
Q502	8-729-027-43	TRANSISTOR DTC114EKA-T146			
		< RESISTOR >			
R501	1-216-819-11	METAL CHIP	680	5%	1/10W
R502	1-216-819-11	METAL CHIP	680	5%	1/10W
R503	1-216-819-11	METAL CHIP	680	5%	1/10W
R504	1-216-821-11	METAL CHIP	1K	5%	1/10W
R505	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R506	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R507	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R508	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R509	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R510	1-218-867-11	METAL CHIP	6.8K	5%	1/10W
R511	1-216-819-11	METAL CHIP	680	5%	1/10W
R512	1-216-819-11	METAL CHIP	680	5%	1/10W
R513	1-216-819-11	METAL CHIP	680	5%	1/10W
R514	1-216-821-11	METAL CHIP	1K	5%	1/10W
R515	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R516	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R517	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R518	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R519	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R531	1-216-809-11	METAL CHIP	100	5%	1/10W
R532	1-216-809-11	METAL CHIP	100	5%	1/10W
R533	1-216-809-11	METAL CHIP	100	5%	1/10W
R534	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R535	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R536	1-216-813-11	METAL CHIP	220	5%	1/10W

DISPLAY | MAIN

Ref. No.	Part No.	Description			Remark
R537	1-216-813-11	METAL CHIP	220	5%	1/10W
R551	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R552	1-216-815-11	METAL CHIP	330	5%	1/10W
R553	1-216-821-11	METAL CHIP	1K	5%	1/10W
R554	1-216-821-11	METAL CHIP	1K	5%	1/10W
R555	1-216-821-11	METAL CHIP	1K	5%	1/10W
R556	1-216-840-11	METAL CHIP	39K	5%	1/10W
R557	1-216-821-11	METAL CHIP	1K	5%	1/10W
R558	1-216-821-11	METAL CHIP	1K	5%	1/10W
R559	1-216-821-11	METAL CHIP	1K	5%	1/10W
R560	1-216-821-11	METAL CHIP	1K	5%	1/10W
R561	1-216-857-11	METAL CHIP	1M	5%	1/10W
R571	1-216-809-11	METAL CHIP	100	5%	1/10W
R572	1-216-809-11	METAL CHIP	100	5%	1/10W
R573	1-216-809-11	METAL CHIP	100	5%	1/10W
R574	1-216-809-11	METAL CHIP	100	5%	1/10W
R575	1-216-813-11	METAL CHIP	220	5%	1/10W
R576	1-216-813-11	METAL CHIP	220	5%	1/10W
R577	1-216-813-11	METAL CHIP	220	5%	1/10W
R578	1-216-813-11	METAL CHIP	220	5%	1/10W
R579	1-216-809-11	METAL CHIP	100	5%	1/10W
R580	1-216-809-11	METAL CHIP	100	5%	1/10W
		< SWITCH >			
S501	1-786-653-11	SWITCH, TACTILE (OPEN/EJECT)			
S502	1-786-653-11	SWITCH, TACTILE (OPEN/EJECT)			
S503	1-771-884-31	SWITCH, TACTILE (OFF)			
S504	1-771-884-31	SWITCH, TACTILE (SOURCE)			
S505	1-771-884-31	SWITCH, TACTILE (MODE)			
S506	1-771-884-31	SWITCH, TACTILE (SEL)			
S507	1-771-884-31	SWITCH, TACTILE (VOLUME +)			
S508	1-771-884-31	SWITCH, TACTILE (VOLUME –)			
S509	1-771-884-31	SWITCH, TACTILE (ATT)			
S510	1-771-884-31	SWITCH, TACTILE (SENS)			
S511	1-771-884-31	SWITCH, TACTILE (1/ALBUM –)			
S512	1-771-884-31	SWITCH, TACTILE (2/ALBUM +)			
S513	1-771-884-31	SWITCH, TACTILE (SEEK + ▶▶I ▶▶)			
S514	1-771-884-31	SWITCH, TACTILE (SEEK ◀◀ I◀◀ –)			
S515	1-771-884-31	SWITCH, TACTILE (EQ3)			
S516	1-771-884-31	SWITCH, TACTILE (DSPL)			
S517	1-771-884-31	SWITCH, TACTILE (BTM)			
S518	1-771-884-31	SWITCH, TACTILE (6)			
S519	1-771-884-31	SWITCH, TACTILE (5)			
S520	1-771-884-31	SWITCH, TACTILE (4/SHUF)			
S521	1-771-884-31	SWITCH, TACTILE (3/REP)			
S522	1-771-884-31	SWITCH, TACTILE (SCRL)			
S523	1-529-566-61	SWITCH, PUSH (1 KEY) (SHUTTER)			
**********					
	A-3283-493-A	MAIN BOARD, COMPLETE (including SPEAKER BOARD) (US,CND)			
	A-3283-494-A	MAIN BOARD, COMPLETE (including SPEAKER BOARD) (E)			
		**********			
	7-685-134-19	SCREW +P 2.6X8 TYPE2 NON-SLIT			
	7-685-793-09	SCREW +PTT 2.6X8 (S)			
	7-685-795-09	SCREW +PTT 2.6X12 (S)			

Ref. No.	Part No.	Description			Remark
		< CAPACITOR >			
C101	1-124-233-11	ELECT	10uF	20%	16V
C106	1-124-234-00	ELECT	22uF	20%	16V
C107	1-124-233-11	ELECT	10uF	20%	16V
C108	1-216-864-11	METAL CHIP	0	5%	1/10W
C109	1-124-233-11	ELECT	10uF	20%	16V
C111	1-124-233-11	ELECT	10uF	20%	16V
C113	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C303	1-216-864-11	METAL CHIP	0	5%	1/10W
C400	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C408	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C409	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C410	1-104-942-11	ELECT	1uF	20%	50V
C411	1-104-942-11	ELECT	1uF	20%	50V
C414	1-128-428-11	ELECT	10uF	20%	35V
C416	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C417	1-124-589-11	ELECT	47uF	20%	16V
C424	1-128-428-11	ELECT	10uF	20%	35V
C425	1-128-428-11	ELECT	10uF	20%	35V
C426	1-128-428-11	ELECT	10uF	20%	35V
C428	1-128-428-11	ELECT	10uF	20%	35V
C430	1-126-947-11	ELECT	47uF	20%	16V
C435	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C436	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C437	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C438	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C440	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C441	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C444	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C446	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C447	1-124-257-00	ELECT	2.2uF	20%	50V
C452	1-128-428-11	ELECT	10uF	20%	35V
C453	1-128-428-11	ELECT	10uF	20%	35V
C600	1-216-864-11	METAL CHIP	0	5%	1/10W
C618	1-126-786-11	ELECT	47uF	20%	16V
C619	1-124-247-61	ELECT	10uF	20%	35V
C620	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C701	1-124-584-00	ELECT	100uF	20%	10V
C704	1-124-584-00	ELECT	100uF	20%	10V
C705	1-124-584-00	ELECT	100uF	20%	10V
C706	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C707	1-124-584-00	ELECT	100uF	20%	10V
C709	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C801	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C802	1-124-589-11	ELECT	47uF	20%	16V
C807	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C809	1-124-584-00	ELECT	100uF	20%	10V
C810	1-125-701-11	DOUBLE LAYERS	0.047F		5.5V
C812	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C813	1-124-584-00	ELECT	100uF	20%	10V
C815	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C816	1-164-160-11	CERAMIC CHIP	20PF	5%	50V
C817	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C818	1-164-160-11	CERAMIC CHIP	20PF	5%	50V
C820	1-162-920-11	CERAMIC CHIP	27PF	5%	50V
C821	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C822	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V

Ref. No.	Part No.	Description			Remark
C823	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C824	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C825	1-124-584-00	ELECT	100uF	20%	10V
C908	1-126-960-11	ELECT	1uF	20%	50V
C909	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C922	1-131-868-81	ELECT	3300uF	20%	16V
		< CONNECTOR >			
CN751	1-817-536-11	CONNECTOR, BOARD TO BOARD 28P			
CNP800	1-794-311-21	PLUG, CONNECTOR 12P			
CNP901	1-774-701-21	PIN, CONNECTOR 16P			
		< JACK >			
CNP900	1-764-270-21	JACK (REMOTE IN) (E)			
		< DIODE >			
D400	8-719-988-61	DIODE 1SS355TE-17			
D600	8-719-069-55	DIODE UDZS-TE17-5.6B			
D701	8-719-988-61	DIODE 1SS355TE-17			
D702	8-719-988-61	DIODE 1SS355TE-17			
D801	8-719-988-61	DIODE 1SS355TE-17			
D804	8-719-050-84	DIODE RB441Q-40T-77			
D808	8-719-977-12	DIODE DTZ6.8B			
D810	8-719-988-61	DIODE 1SS355TE-17 (E)			
D811	8-719-109-97	DIODE RD6.8ES-B2			
D812	8-719-109-97	DIODE RD6.8ES-B2			
D813	8-719-109-97	DIODE RD6.8ES-B2			
D814	8-719-109-97	DIODE RD6.8ES-B2			
D815	8-719-109-97	DIODE RD6.8ES-B2			
D816	8-719-109-97	DIODE RD6.8ES-B2			
D817	8-719-109-97	DIODE RD6.8ES-B2			
D818	8-719-071-34	DIODE RB521S-30-TE61			
D820	8-719-991-33	DIODE 1SS133T-77			
D855	8-719-071-34	DIODE RB521S-30-TE61			
D856	8-719-071-34	DIODE RB521S-30-TE61			
D902	8-719-053-18	DIODE 1SR154-400TE-25			
D903	8-719-053-18	DIODE 1SR154-400TE-25			
D904	8-719-200-82	DIODE 11ES2			
D905	8-719-200-82	DIODE 11ES2			
D906	8-719-200-82	DIODE 11ES2			
D907	8-719-200-82	DIODE 11ES2			
D908	8-719-200-82	DIODE 11ES2			
D909	8-719-200-82	DIODE 11ES2			
D912	8-719-083-66	DIODE UDZS-TE17-18B			
D914	8-719-977-12	DIODE DTZ6.8B			
D915	8-719-056-84	DIODE UDZ-TE-17-7.5B			
D916	8-719-200-82	DIODE 11ES2			
D917	8-719-200-82	DIODE 11ES2			
D919	8-719-049-38	DIODE 1N5404TU			
D921	8-719-200-82	DIODE 11ES2			
D922	8-719-200-82	DIODE 11ES2			
		< IC >			
IC100	6-705-360-01	IC TDA8588BJ/N2			
IC401	6-705-372-01	IC BD3808FS-FE2			
IC801	6-803-821-01	IC MB90487PF-G-104-BNDE1			
IC802	8-759-659-13	IC PST3428UL			

Ref. No.	Part No.	Description			Remark
		< JUMPER RESISTOR >			
JR5	1-216-864-11	METAL CHIP	0	5%	1/10W
JR6	1-216-864-11	METAL CHIP	0	5%	1/10W
JR7	1-216-864-11	METAL CHIP	0	5%	1/10W
JR10	1-216-864-11	METAL CHIP	0	5%	1/10W
JR103	1-216-864-11	METAL CHIP	0	5%	1/10W
		< COIL >			
L400	1-414-398-11	INDUCTOR	10uH		
L602	1-414-394-41	INDUCTOR	2.2uH		
L700	1-410-501-11	INDUCTOR	2.2uH		
L701	1-410-501-11	INDUCTOR	2.2uH		
L702	1-410-509-11	INDUCTOR	10uH		
L703	1-216-295-11	SHORT CHIP	0		
L900	1-456-617-11	COIL, CHOKE	250uH		
		< JACK >			
PJ401	1-774-698-11	JACK, PIN 2P (AUDIO OUT REAR)			
PJ601	1-793-598-11	JACK (ANTENNA)			
		< TRANSISTOR >			
Q400	8-729-038-71	TRANSISTOR KRC107S			
Q401	8-729-038-55	TRANSISTOR KRA103S			
Q402	6-550-752-01	TRANSISTOR DTC614TKT146			
Q403	6-550-752-01	TRANSISTOR DTC614TKT146			
Q404	6-550-752-01	TRANSISTOR DTC614TKT146			
Q405	6-550-752-01	TRANSISTOR DTC614TKT146			
Q406	6-550-752-01	TRANSISTOR DTC614TKT146			
Q407	6-550-752-01	TRANSISTOR DTC614TKT146			
Q601	8-729-920-85	TRANSISTOR 2SD1664-QR			
Q800	8-729-038-55	TRANSISTOR KRA103S			
Q900	8-729-034-51	TRANSISTOR KTC3875			
Q902	8-729-038-67	TRANSISTOR KRC102S			
Q906	8-729-034-51	TRANSISTOR KTC3875			
Q907	8-729-038-67	TRANSISTOR KRC102S			
		< RESISTOR >			
R404	1-216-809-11	METAL CHIP	100	5%	1/10W
R405	1-216-809-11	METAL CHIP	100	5%	1/10W
R406	1-216-809-11	METAL CHIP	100	5%	1/10W
R407	1-216-809-11	METAL CHIP	100	5%	1/10W
R409	1-216-839-11	METAL CHIP	33K	5%	1/10W
R411	1-216-809-11	METAL CHIP	100	5%	1/10W
R412	1-216-809-11	METAL CHIP	100	5%	1/10W
R414	1-216-809-11	METAL CHIP	100	5%	1/10W
R415	1-216-809-11	METAL CHIP	100	5%	1/10W
R416	1-216-809-11	METAL CHIP	100	5%	1/10W
R417	1-216-809-11	METAL CHIP	100	5%	1/10W
R418	1-216-841-11	METAL CHIP	47K	5%	1/10W
R419	1-216-841-11	METAL CHIP	47K	5%	1/10W
R420	1-216-841-11	METAL CHIP	47K	5%	1/10W
R421	1-216-841-11	METAL CHIP	47K	5%	1/10W
R424	1-216-805-11	METAL CHIP	47	5%	1/10W
R427	1-216-809-11	METAL CHIP	100	5%	1/10W
R429	1-247-807-31	CARBON	100	5%	1/4W
R431	1-247-807-31	CARBON	100	5%	1/4W
R432	1-216-809-11	METAL CHIP	100	5%	1/10W

Ref. No.	Part No.	Description			Remark
R435	1-216-809-11	METAL CHIP	100	5%	1/10W
R436	1-216-809-11	METAL CHIP	100	5%	1/10W
R437	1-216-821-11	METAL CHIP	1K	5%	1/10W
R440	1-216-809-11	METAL CHIP	100	5%	1/10W
R441	1-216-809-11	METAL CHIP	100	5%	1/10W
R442	1-216-841-11	METAL CHIP	47K	5%	1/10W
R443	1-216-841-11	METAL CHIP	47K	5%	1/10W
R447	1-216-809-11	METAL CHIP	100	5%	1/10W
R448	1-216-841-11	METAL CHIP	47K	5%	1/10W
R603	1-247-807-31	CARBON	100	5%	1/4W
R604	1-247-807-31	CARBON	100	5%	1/4W
R606	1-216-809-11	METAL CHIP	100	5%	1/10W
R607	1-216-809-11	METAL CHIP	100	5%	1/10W
R608	1-216-809-11	METAL CHIP	100	5%	1/10W
R615	1-216-821-11	METAL CHIP	1K	5%	1/10W
R705	1-216-809-11	METAL CHIP	100	5%	1/10W
R708	1-216-864-11	METAL CHIP	0	5%	1/10W
R722	1-216-809-11	METAL CHIP	100	5%	1/10W
R800	1-216-841-11	METAL CHIP	47K	5%	1/10W (E)
R801	1-216-809-11	METAL CHIP	100	5%	1/10W
R804	1-216-809-11	METAL CHIP	100	5%	1/10W
R805	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R806	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R808	1-216-845-11	METAL CHIP	100K	5%	1/10W (E)
R808	1-216-864-11	METAL CHIP	0	5%	1/10W (US,CND)
R809	1-216-845-11	METAL CHIP	100K	5%	1/10W (E)
R813	1-249-441-11	CARBON	100K	5%	1/4W
R814	1-216-845-11	METAL CHIP	100K	5%	1/10W
R815	1-249-435-11	CARBON	33K	5%	1/4W
R818	1-216-809-11	METAL CHIP	100	5%	1/10W
R819	1-216-809-11	METAL CHIP	100	5%	1/10W
R820	1-216-845-11	METAL CHIP	100K	5%	1/10W
R821	1-216-817-11	METAL CHIP	470	5%	1/10W
R822	1-216-817-11	METAL CHIP	470	5%	1/10W
R823	1-216-817-11	METAL CHIP	470	5%	1/10W
R824	1-216-849-11	METAL CHIP	220K	5%	1/10W
R825	1-216-849-11	METAL CHIP	220K	5%	1/10W
R826	1-216-843-11	METAL CHIP	68K	5%	1/10W
R828	1-216-809-11	METAL CHIP	100	5%	1/10W
R830	1-216-809-11	METAL CHIP	100	5%	1/10W
R832	1-216-867-11	METAL CHIP	6.8K	5%	1/10W
R833	1-249-417-11	CARBON	1K	5%	1/4W
R834	1-216-867-11	METAL CHIP	6.8K	5%	1/10W
R837	1-216-864-11	METAL CHIP	0	5%	1/10W
R844	1-216-845-11	METAL CHIP	100K	5%	1/10W
R848	1-216-845-11	METAL CHIP	100K	5%	1/10W
R849	1-216-841-11	METAL CHIP	47K	5%	1/10W
R850	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R852	1-216-864-11	METAL CHIP	0	5%	1/10W
R853	1-216-864-11	METAL CHIP	0	5%	1/10W
R854	1-216-864-11	METAL CHIP	0	5%	1/10W
R857	1-216-809-11	METAL CHIP	100	5%	1/10W
R858	1-216-809-11	METAL CHIP	100	5%	1/10W
R859	1-216-809-11	METAL CHIP	100	5%	1/10W
R860	1-216-845-11	METAL CHIP	100K	5%	1/10W
R861	1-216-809-11	METAL CHIP	100	5%	1/10W (E)
R862	1-216-809-11	METAL CHIP	100	5%	1/10W (E)
R864	1-249-441-11	CARBON	100K	5%	1/4W
R865	1-249-441-11	CARBON	100K	5%	1/4W
R873	1-216-845-11	METAL CHIP	100K	5%	1/10W
R901	1-216-845-11	METAL CHIP	100K	5%	1/10W
R902	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R903	1-216-841-11	METAL CHIP	47K	5%	1/10W
R904	1-216-841-11	METAL CHIP	47K	5%	1/10W
R912	1-249-417-11	CARBON	1K	5%	1/4W
R913	1-216-821-11	METAL CHIP	1K	5%	1/10W
R914	1-469-144-21	FERRITE, EMI (SMD) (E)			
R915	1-469-144-21	FERRITE, EMI (SMD) (E)			
R917	1-249-421-11	CARBON	2.2K	5%	1/4W
R925	1-216-845-11	METAL CHIP	100K	5%	1/10W
R927	1-216-833-11	METAL CHIP	10K	5%	1/10W
R928	1-249-421-11	CARBON	2.2K	5%	1/4W
R931	1-216-073-00	RES-CHIP	10K	5%	1/10W
R932	1-216-073-00	RES-CHIP	10K	5%	1/10W
R936	1-216-864-11	METAL CHIP	0	5%	1/10W
		< SWITCH >			
S800	1-571-478-11	SWITCH, SLIDE (FREQUENCY SELECT) (E)			
S802	1-762-638-21	SWITCH, TACTILE (RESET)			
		< TUNER >			
TUX601	A-3220-961-A	TUNER UNIT (TUX-032)			
		< VIBRATOR >			
X800	1-767-993-21	VIBRATOR, CRYSTAL (3.68MHz)			
X801	1-813-202-11	VIBRATOR, CRYSTAL (32.768kHz)			
**********					
		SENSOR BOARD			
		**********			
		< SWITCH >			
SW2	1-529-566-61	SWITCH, PUSH (1 KEY) (SELF)			
SW3	1-529-566-61	SWITCH, PUSH (1 KEY) (DISC IN)			
**********					
	A-3283-359-A	SERVO BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C1	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C2	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C3	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C4	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C5	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C6	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C7	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C8	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C10	1-104-609-11	ELECT CHIP	100uF	20%	4V
C11	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C13	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C14	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V

SERVO

Ref. No.	Part No.	Description			Remark
C16	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C18	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C19	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C21	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C22	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C23	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C24	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C25	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C26	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C27	1-126-208-21	ELECT CHIP	47uF	20%	4V
C28	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C29	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C30	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C32	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C33	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C34	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C35	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C36	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C37	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C38	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C39	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C40	1-162-969-11	CERAMIC CHIP	0.0068uF	10%	25V
C41	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C42	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C43	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C44	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C45	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C46	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C47	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C48	1-104-609-11	ELECT CHIP	100uF	20%	4V
C49	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C50	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C51	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C52	1-100-381-11	ELECT CHIP	10uF	20%	16V
C53	1-100-381-11	ELECT CHIP	10uF	20%	16V
C54	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C55	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C56	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C57	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C58	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C59	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C60	1-100-381-11	ELECT CHIP	10uF	20%	16V
C63	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C64	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C65	1-126-208-21	ELECT CHIP	47uF	20%	4V
C66	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C67	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C74	1-126-208-21	ELECT CHIP	47uF	20%	4V
C75	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C77	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C79	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C83	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C85	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C86	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C91	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C92	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C109	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C110	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C115	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
		< CONNECTOR >			
CN1	1-794-153-21	CONNECTOR, FPC (ZIF) 16P			
CN2	1-817-275-21	CONNECTOR, BOARD TO BOARD 28P			
		< JUMPER RESISTOR >			
FB1	1-216-864-11	METAL CHIP	0	5%	1/10W
FB2	1-216-864-11	METAL CHIP	0	5%	1/10W
FB5	1-216-864-11	METAL CHIP	0	5%	1/10W
		< IC >			
IC1	6-705-366-01	IC LA6560-TE-L-E			
IC3	8-752-425-12	IC CXD3059AR			
IC4	6-804-028-01	IC MB90487PFV-G-105-BNDE1			
IC7	6-705-364-01	IC R1114N151D-TR-FA			
IC8	6-705-365-01	IC TC94A34FG-002			
		< TRANSISTOR >			
Q1	8-729-904-87	TRANSISTOR 2SB1197K-R			
Q2	8-729-928-90	TRANSISTOR DTC114EE			
Q3	8-729-904-87	TRANSISTOR 2SB1197K-R			
Q5	8-729-904-87	TRANSISTOR 2SB1197K-R			
Q6	8-729-928-90	TRANSISTOR DTC114EE			
		< RESISTOR >			
R1	1-218-941-81	RES-CHIP	100	5%	1/16W
R2	1-218-971-11	RES-CHIP	33K	5%	1/16W
R3	1-218-971-11	RES-CHIP	33K	5%	1/16W
R4	1-218-965-11	RES-CHIP	10K	5%	1/16W
R5	1-218-965-11	RES-CHIP	10K	5%	1/16W
R6	1-218-965-11	RES-CHIP	10K	5%	1/16W
R7	1-208-635-11	RES-CHIP	10	5%	1/16W
R8	1-218-971-11	RES-CHIP	33K	5%	1/16W
R9	1-218-971-11	RES-CHIP	33K	5%	1/16W
R10	1-218-965-11	RES-CHIP	10K	5%	1/16W
R11	1-218-965-11	RES-CHIP	10K	5%	1/16W
R12	1-208-635-11	RES-CHIP	10	5%	1/16W
R13	1-218-965-11	RES-CHIP	10K	5%	1/16W
R14	1-218-990-11	SHORT CHIP	0		
R15	1-218-990-11	SHORT CHIP	0		
R16	1-218-990-11	SHORT CHIP	0		
R17	1-218-965-11	RES-CHIP	10K	5%	1/16W
R18	1-218-965-11	RES-CHIP	10K	5%	1/16W
R19	1-218-969-11	RES-CHIP	22K	5%	1/16W
R20	1-218-969-11	RES-CHIP	22K	5%	1/16W
R21	1-218-990-11	SHORT CHIP	0		
R22	1-218-967-11	RES-CHIP	15K	5%	1/16W
R23	1-218-967-11	RES-CHIP	15K	5%	1/16W
R24	1-218-953-11	RES-CHIP	1K	5%	1/16W
R25	1-218-953-11	RES-CHIP	1K	5%	1/16W
R26	1-218-981-11	RES-CHIP	220K	5%	1/16W
R27	1-218-965-11	RES-CHIP	10K	5%	1/16W
R28	1-218-990-11	SHORT CHIP	0		
R29	1-218-977-11	RES-CHIP	100K	5%	1/16W
R37	1-218-990-11	SHORT CHIP	0		
R38	1-218-967-11	RES-CHIP	15K	5%	1/16W
R39	1-218-941-81	RES-CHIP	100	5%	1/16W

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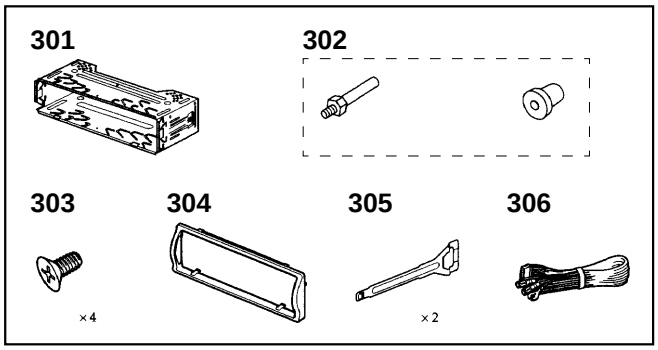
Ref. No.	Part No.	Description			Remark
R40	1-218-990-11	SHORT CHIP	0		
R41	1-218-985-11	RES-CHIP	470K	5%	1/16W
R42	1-218-965-11	RES-CHIP	10K	5%	1/16W
R43	1-218-977-11	RES-CHIP	100K	5%	1/16W
R44	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R45	1-218-971-11	RES-CHIP	33K	5%	1/16W
R46	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R47	1-218-977-11	RES-CHIP	100K	5%	1/16W
R48	1-218-941-81	RES-CHIP	100	5%	1/16W
R49	1-218-953-11	RES-CHIP	1K	5%	1/16W
R50	1-218-941-81	RES-CHIP	100	5%	1/16W
R52	1-218-941-81	RES-CHIP	100	5%	1/16W
R53	1-218-959-11	RES-CHIP	3.3K	5%	1/16W
R54	1-218-961-11	RES-CHIP	4.7K	5%	1/16W
R55	1-218-953-11	RES-CHIP	1K	5%	1/16W
R56	1-218-973-11	RES-CHIP	47K	5%	1/16W
R57	1-218-941-81	RES-CHIP	100	5%	1/16W
R59	1-218-941-81	RES-CHIP	100	5%	1/16W
R60	1-218-990-11	SHORT CHIP	0		
R61	1-218-985-11	RES-CHIP	470K	5%	1/16W
R62	1-218-941-81	RES-CHIP	100	5%	1/16W
R64	1-218-941-81	RES-CHIP	100	5%	1/16W
R65	1-218-941-81	RES-CHIP	100	5%	1/16W
R67	1-218-941-81	RES-CHIP	100	5%	1/16W
R68	1-218-990-11	SHORT CHIP	0		
R69	1-218-973-11	RES-CHIP	47K	5%	1/16W
R70	1-218-945-11	RES-CHIP	220	5%	1/16W
R71	1-218-941-81	RES-CHIP	100	5%	1/16W
R72	1-218-990-11	SHORT CHIP	0		
R73	1-218-941-81	RES-CHIP	100	5%	1/16W
R74	1-218-941-81	RES-CHIP	100	5%	1/16W
R76	1-218-941-81	RES-CHIP	100	5%	1/16W
R77	1-218-990-11	SHORT CHIP	0		
R78	1-218-941-81	RES-CHIP	100	5%	1/16W
R79	1-218-941-81	RES-CHIP	100	5%	1/16W
R80	1-218-977-11	RES-CHIP	100K	5%	1/16W
R81	1-218-941-81	RES-CHIP	100	5%	1/16W
R85	1-218-973-11	RES-CHIP	47K	5%	1/16W
R86	1-218-973-11	RES-CHIP	47K	5%	1/16W
R87	1-218-973-11	RES-CHIP	47K	5%	1/16W
R91	1-220-200-81	RES-CHIP	30K	5%	1/16W
R92	1-218-971-11	RES-CHIP	33K	5%	1/16W
R96	1-218-990-11	SHORT CHIP	0		
R97	1-218-941-81	RES-CHIP	100	5%	1/16W
R98	1-218-941-81	RES-CHIP	100	5%	1/16W
R99	1-218-965-11	RES-CHIP	10K	5%	1/16W
R101	1-218-969-11	RES-CHIP	22K	5%	1/16W
R102	1-218-990-11	SHORT CHIP	0		
R106	1-218-969-11	RES-CHIP	22K	5%	1/16W
R107	1-218-965-11	RES-CHIP	10K	5%	1/16W
R108	1-218-941-81	RES-CHIP	100	5%	1/16W
R109	1-218-941-81	RES-CHIP	100	5%	1/16W
R110	1-218-945-11	RES-CHIP	220	5%	1/16W
R111	1-218-990-11	SHORT CHIP	0		
R114	1-218-941-81	RES-CHIP	100	5%	1/16W
R115	1-218-941-81	RES-CHIP	100	5%	1/16W
R116	1-218-941-81	RES-CHIP	100	5%	1/16W
R117	1-218-990-11	SHORT CHIP	0		

Ref. No.	Part No.	Description			Remark
R119	1-218-941-81	RES-CHIP	100	5%	1/16W
R122	1-218-941-81	RES-CHIP	100	5%	1/16W
R123	1-218-990-11	SHORT CHIP	0		
R124	1-216-864-11	METAL CHIP	0	5%	1/10W
R126	1-218-941-81	RES-CHIP	100	5%	1/16W
R127	1-218-941-81	RES-CHIP	100	5%	1/16W
R128	1-218-941-81	RES-CHIP	100	5%	1/16W
R129	1-218-941-81	RES-CHIP	100	5%	1/16W
R133	1-216-864-11	METAL CHIP	0	5%	1/10W
R136	1-218-977-11	RES-CHIP	100K	5%	1/16W
R139	1-218-957-11	RES-CHIP	2.2K	5%	1/16W
R140	1-218-941-81	RES-CHIP	100	5%	1/16W
R141	1-218-941-81	RES-CHIP	100	5%	1/16W
R142	1-218-941-81	RES-CHIP	100	5%	1/16W
R143	1-218-941-81	RES-CHIP	100	5%	1/16W
R144	1-218-965-11	RES-CHIP	10K	5%	1/16W
R145	1-218-977-11	RES-CHIP	100K	5%	1/16W
R146	1-218-941-81	RES-CHIP	100	5%	1/16W
R147	1-218-941-81	RES-CHIP	100	5%	1/16W
R148	1-218-941-81	RES-CHIP	100	5%	1/16W
		< SWITCH >			
SW1	1-529-565-61	SWITCH, PUSH (1 KEY) (DOWN)			
		< VIBRATOR >			
X1	1-795-561-21	VIBRATOR, CERAMIC (16.9344MHz)			
X2	1-795-822-21	VIBRATOR, CERAMIC (18.43MHz)			
**********					
		MISCELLANEOUS			
		**********			
6	1-776-206-21	CORD (WITH CONNECTOR) (POWER)			
⚠153	8-820-207-02	OPTICAL PICK-UP (KSS1000E/K1RP)			
154	A-3337-640-A	CHASSIS (OP) SUB ASSY (including M901)			
F901	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) 10A			
M902	A-3337-638-A	MOTOR ASSY, SL (SLED)			
M903	A-3372-454-A	MOTOR ASSY, LE (LOADING)			
SW4	1-571-099-11	SWITCH (1 KEY) (LIMIT)			
**********					
		ACCESSORIES			
		**********			
	3-261-845-11	MANUAL, INSTRUCTION (ENGLISH,FRENCH) (US,CND)			
	3-261-845-21	MANUAL, INSTRUCTION (ENGLISH,SPANISH, TRADITIONAL CHINESE) (E)			
	3-261-846-11	MANUAL, INSTRUCTION, INSTALL (ENGLISH, FRENCH) (US,CND)			
	3-261-846-21	MANUAL, INSTRUCTION, INSTALL (ENGLISH, SPANISH,TRADITIONAL CHINESE) (E)			
	X-3378-390-3	CASE ASSY (for FRONT PANEL)			
**********					

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark
		PARTS FOR INSTALLATION AND CONNECTIONS	
		**********	
301	X-3382-647-1	FRAME ASSY, FITTING	
302	X-3366-405-1	SCREW ASSY (EXP), FITTING (E)	
303	3-934-325-01	SCREW (+K 5X8 TP)	
304	3-260-282-01	COLLAR	
305	3-246-471-01	KEY (FRAME)	
306	1-776-206-21	CORD (WITH CONNECTOR) (POWER)	



MEMO

CDX-R3300/R3300S

SONY

SERVICE MANUAL

Ver. 1.2 2005.07

US Model
Canadian Model
CDX-R3300
E Model
CDX-R3300/R3300S

SUPPLEMENT-1

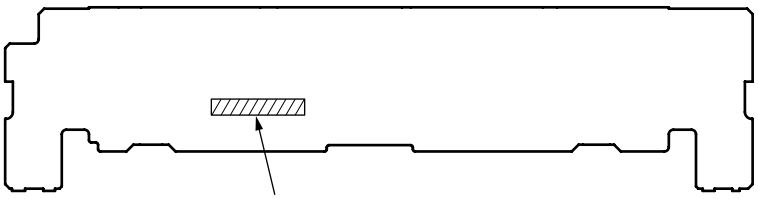
File this supplement with the service manual.

Subject : Change of display board.

When performing service and inspection, check the suffix of the part number of the display board.

DISCRIMINATION

– DISPLAY BOARD (SIDE B) –



DISPLAY BOARD Part No.
Former : 1-861-024-11
New : 1-861-024-13

• NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

For schematic diagrams.

Note:

- All capacitors are in µF unless otherwise noted. (p: pF) 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une piéce portant le numéro spécifié.

- ▬ : B+ Line.
- ▬ ▬ : B– Line.
- ▭ : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- CD mechanism section (1/2), (2/2)
  no mark : CD PLAY
- Main (1/2), (2/2) and Display sections
  no mark : FM
  ( ) : AM
  < > : CD PLAY
  * : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : CD PLAY
  ⇨ : FM
  ➡ : AM
- Abbreviation
  CND : Canadian model.

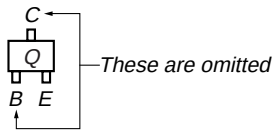
For printed wiring boards.

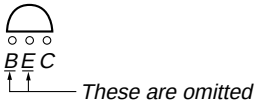
Note:

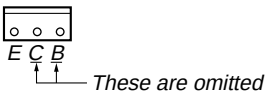
- o——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- ○ : Through hole.
- ▬ : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)

Caution:	
Pattern face side: (Side B)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Side A)	Parts on the parts face side seen from the parts face are indicated.



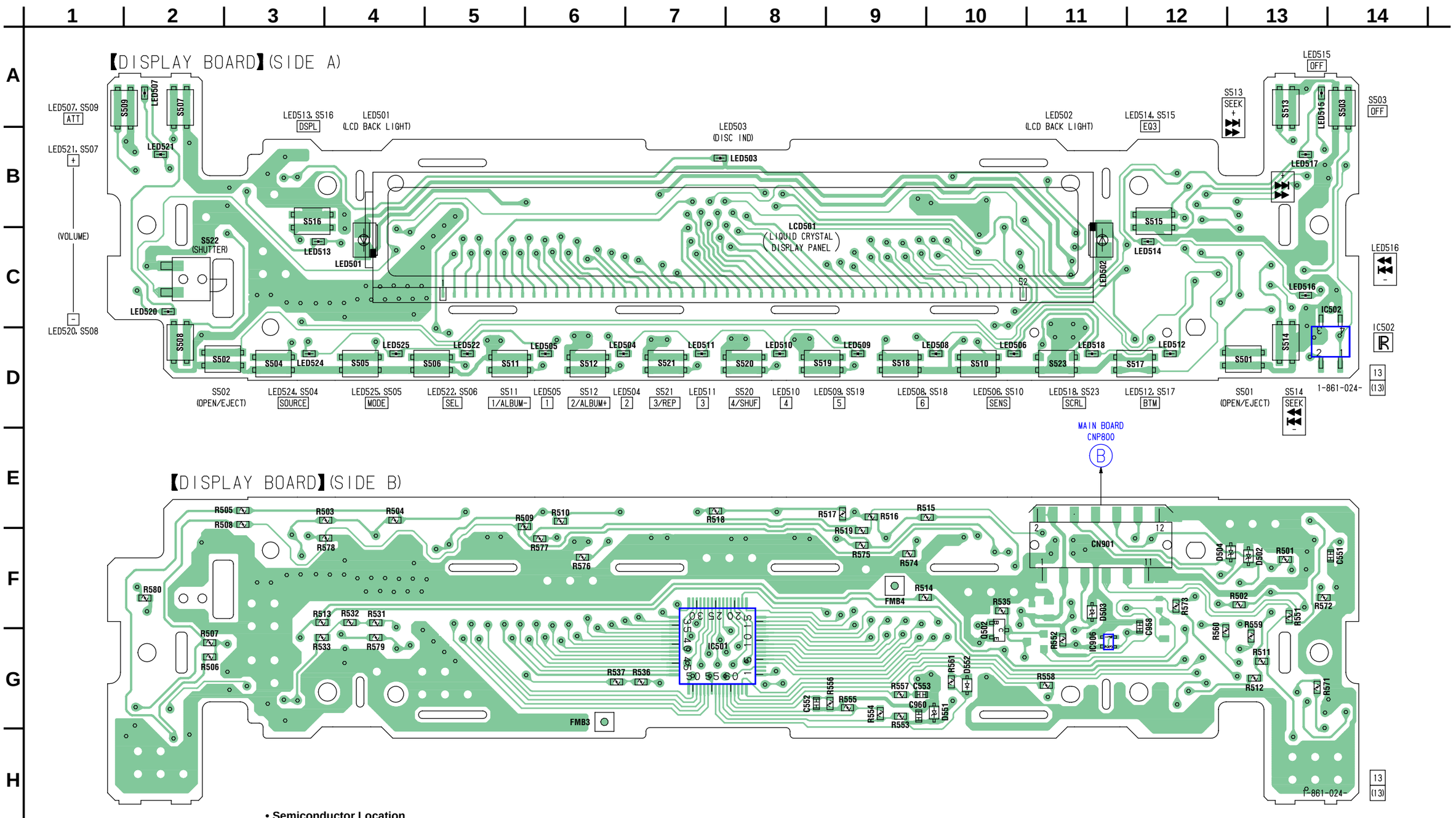




- Abbreviation
  CND : Canadian model.

1. PRINTED WIRING BOARD — DISPLAY SECTION —

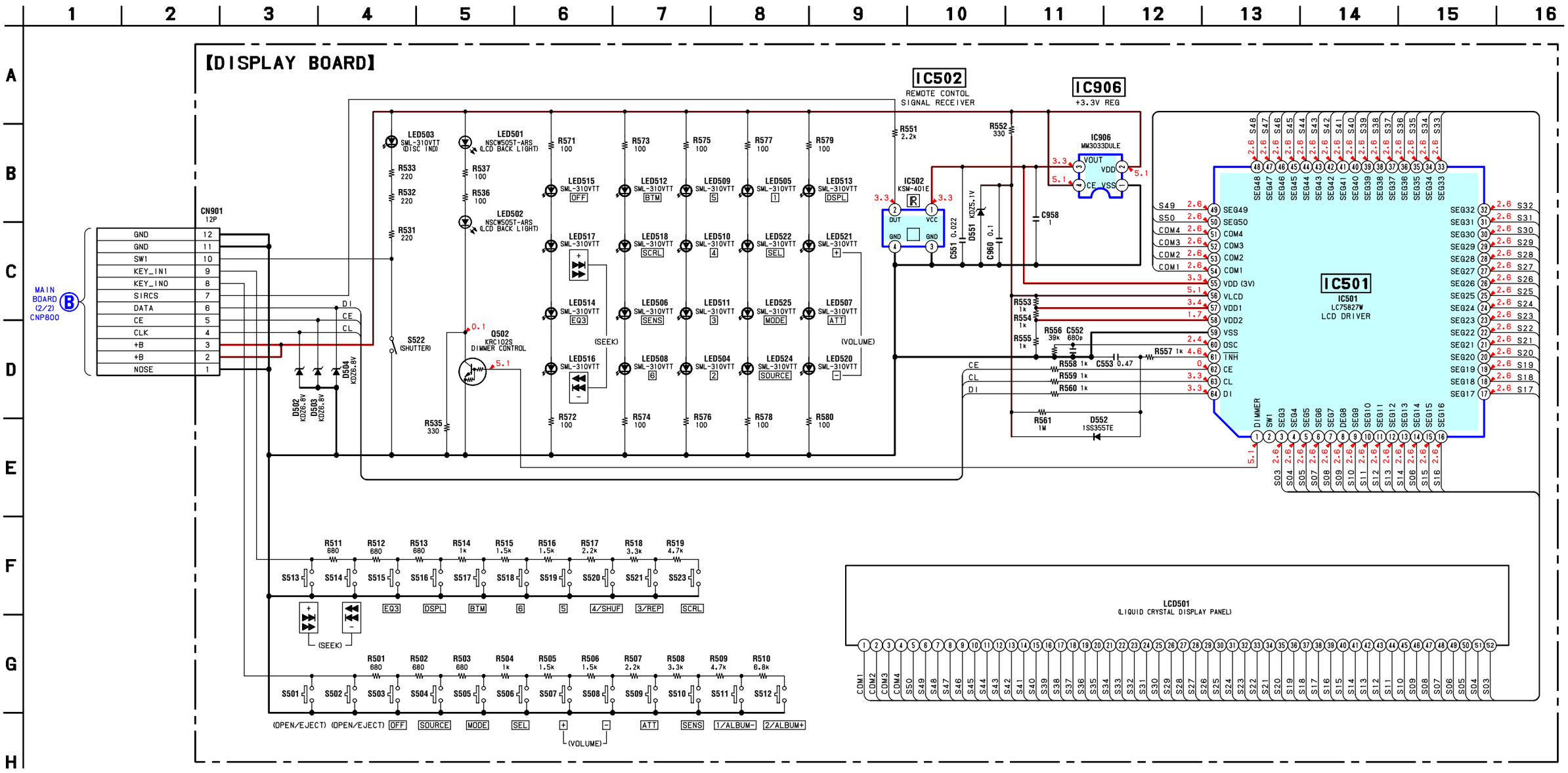
: Uses unleaded solder.



• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D502	F-13	LED503	B-8	LED515	A-13
D503	F-11	LED504	D-6	LED516	C-13
D504	F-13	LED505	D-6	LED517	B-13
D551	G-10	LED506	D-10	LED518	D-11
D552	G-10	LED507	A-2	LED520	C-2
		LED508	D-10	LED521	B-2
IC501	G-7	LED509	D-9	LED522	D-5
IC502	D-14	LED510	D-8	LED524	D-3
IC906	G-11	LED511	D-7	LED525	D-4
		LED512	D-12		
LED501	C-4	LED513	C-3	Q502	G-10
LED502	C-11	LED514	C-12		

2. SCHEMATIC DIAGRAM — DISPLAY SECTION —



3. ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable
- Abbreviation
  CND : Canadian model
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u : µ, for example:
  uA.. : µA.. uPA.. : µPA..
  uPB.. : µPB.. uPC.. : µPC.. uPD.. : µPD..
- CAPACITORS
  uF : µF
- COILS
  uH : µH

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une piéce portant le numéro spécifié.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
		DISPLAY BOARD			
		**********			
	1-780-120-11	CONDUCTIVE BOARD, CONNECTION			
	3-258-884-01	SHEET (ILLUMINATOR)			
		< CAPACITOR >			
C551	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C552	1-162-963-11	CERAMIC CHIP	680PF	10%	50V
C553	1-125-891-11	CERAMIC CHIP	0.47uF	10%	10V
C958	1-125-837-11	CERAMIC CHIP	1uF	10%	6.3V
C960	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
		< CONNECTOR >			
CN901	1-794-312-21	PIN, CONNECTOR 12P			
		< DIODE >			
D502	8-719-977-12	DIODE DTZ6.8B			
D503	8-719-977-12	DIODE DTZ6.8B			
D504	8-719-977-12	DIODE DTZ6.8B			
D551	8-719-080-28	DIODE KDZ5.1V			
D552	8-719-988-61	DIODE 1SS355TE-17			
		< IC >			
IC501	6-705-180-01	IC LC75827W			
IC502	6-600-384-01	IC KSM-401E (IR)			
IC906	6-705-374-01	IC MM3033DULE			
		< LIQUID CRYSTAL DISPLAY >			
LCD501	1-805-451-11	DISPLAY PANEL, LIQUID CRYSTAL			
		< LED >			
LED501	6-500-459-01	LED NSCW505T-ARS (LCD BACK LIGHT)			
LED502	6-500-459-01	LED NSCW505T-ARS (LCD BACK LIGHT)			
LED503	8-719-053-09	LED SML-310VTT86 (DISC IND)			
LED504	8-719-053-09	LED SML-310VTT86 (2)			
LED505	8-719-053-09	LED SML-310VTT86 (1)			
LED506	8-719-053-09	LED SML-310VTT86 (SENS)			
LED507	8-719-053-09	LED SML-310VTT86 (ATT)			
LED508	8-719-053-09	LED SML-310VTT86 (6)			
LED509	8-719-053-09	LED SML-310VTT86 (5)			
LED510	8-719-053-09	LED SML-310VTT86 (4)			
LED511	8-719-053-09	LED SML-310VTT86 (3)			
LED512	8-719-053-09	LED SML-310VTT86 (BTM)			
LED513	8-719-053-09	LED SML-310VTT86 (DSPL)			
LED514	8-719-053-09	LED SML-310VTT86 (EQ3)			
LED515	8-719-053-09	LED SML-310VTT86 (OFF)			
LED516	8-719-053-09	LED SML-310VTT86 (SEEK – ◀◀ I◀◀)			
LED517	8-719-053-09	LED SML-310VTT86 (SEEK + ▶▶I ▶▶)			
LED518	8-719-053-09	LED SML-310VTT86 (SCRL)			
LED520	8-719-053-09	LED SML-310VTT86 (VOLUME –)			
LED521	8-719-053-09	LED SML-310VTT86 (VOLUME +)			
LED522	8-719-053-09	LED SML-310VTT86 (SEL)			
LED524	8-719-053-09	LED SML-310VTT86 (SOURCE)			
LED525	8-719-053-09	LED SML-310VTT86 (MODE)			
		< TRANSISTOR >			
Q502	8-729-038-67	TRANSISTOR KRC102S			
		< RESISTOR >			
R501	1-216-819-11	METAL CHIP	680	5%	1/10W
R502	1-216-819-11	METAL CHIP	680	5%	1/10W
R503	1-216-819-11	METAL CHIP	680	5%	1/10W
R504	1-216-821-11	METAL CHIP	1K	5%	1/10W
R505	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R506	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R507	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R508	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R509	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R510	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R511	1-216-819-11	METAL CHIP	680	5%	1/10W
R512	1-216-819-11	METAL CHIP	680	5%	1/10W
R513	1-216-819-11	METAL CHIP	680	5%	1/10W
R514	1-216-821-11	METAL CHIP	1K	5%	1/10W
R515	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R516	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R517	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R518	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R519	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R531	1-216-813-11	METAL CHIP	220	5%	1/10W
R532	1-216-813-11	METAL CHIP	220	5%	1/10W
R533	1-216-813-11	METAL CHIP	220	5%	1/10W
R535	1-216-815-11	METAL CHIP	330	5%	1/10W
R536	1-216-809-11	METAL CHIP	100	5%	1/10W
R537	1-216-809-11	METAL CHIP	100	5%	1/10W
R551	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R552	1-216-815-11	METAL CHIP	330	5%	1/10W
R553	1-216-821-11	METAL CHIP	1K	5%	1/10W
R554	1-216-821-11	METAL CHIP	1K	5%	1/10W
R555	1-216-821-11	METAL CHIP	1K	5%	1/10W

DISPLAY

Ref. No.	Part No.	Description			Remark
R556	1-216-840-11	METAL CHIP	39K	5%	1/10W
R557	1-216-821-11	METAL CHIP	1K	5%	1/10W
R558	1-216-821-11	METAL CHIP	1K	5%	1/10W
R559	1-216-821-11	METAL CHIP	1K	5%	1/10W
R560	1-216-821-11	METAL CHIP	1K	5%	1/10W
R561	1-216-857-11	METAL CHIP	1M	5%	1/10W
R571	1-216-809-11	METAL CHIP	100	5%	1/10W
R572	1-216-809-11	METAL CHIP	100	5%	1/10W
R573	1-216-809-11	METAL CHIP	100	5%	1/10W
R574	1-216-809-11	METAL CHIP	100	5%	1/10W
R575	1-216-809-11	METAL CHIP	100	5%	1/10W
R576	1-216-809-11	METAL CHIP	100	5%	1/10W
R577	1-216-809-11	METAL CHIP	100	5%	1/10W
R578	1-216-809-11	METAL CHIP	100	5%	1/10W
R579	1-216-809-11	METAL CHIP	100	5%	1/10W
R580	1-216-809-11	METAL CHIP	100	5%	1/10W
		< SWITCH >			
S501	1-786-763-11	SWITCH, TACTILE (OPEN/EJECT)			
S502	1-786-763-11	SWITCH, TACTILE (OPEN/EJECT)			
S503	1-786-763-11	SWITCH, TACTILE (OFF)			
S504	1-786-763-11	SWITCH, TACTILE (SOURCE)			
S505	1-786-763-11	SWITCH, TACTILE (MODE)			
S506	1-786-763-11	SWITCH, TACTILE (SEL)			
S507	1-786-763-11	SWITCH, TACTILE (VOLUME +)			
S508	1-786-763-11	SWITCH, TACTILE (VOLUME –)			
S509	1-786-763-11	SWITCH, TACTILE (ATT)			
S510	1-786-763-11	SWITCH, TACTILE (SENS)			
S511	1-786-763-11	SWITCH, TACTILE (1/ALBUM –)			
S512	1-786-763-11	SWITCH, TACTILE (2/ALBUM +)			
S513	1-786-763-11	SWITCH, TACTILE (SEEK + ▶▶I ▶▶)			
S514	1-786-763-11	SWITCH, TACTILE (SEEK – ◀◀ I◀◀)			
S515	1-786-763-11	SWITCH, TACTILE (EQ3)			
S516	1-786-763-11	SWITCH, TACTILE (DSPL)			
S517	1-786-763-11	SWITCH, TACTILE (BTM)			
S518	1-786-763-11	SWITCH, TACTILE (6)			
S519	1-786-763-11	SWITCH, TACTILE (5)			
S520	1-786-763-11	SWITCH, TACTILE (4/SHUF)			
S521	1-786-763-11	SWITCH, TACTILE (3/REP)			
S522	1-529-566-61	SWITCH, PUSH (1 KEY) (SHUTTER)			
S523	1-786-763-11	SWITCH, TACTILE (SCRL)			

MEMO

REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2003.12	New
1.1	2004.06	Part number correction of TUX601. (SPM-04010)
1.2	2005.07	Change of display board. (Suffix -11 to -13) (SPM-05009)